

HYDRAULIC TUBING REPLACEMENT INSTRUCTIONS

STEP 1: Removal

1. Lower the Power-Pole down so that the Everflex® Spike is touching the ground.

WARNING: Be careful not to touch the spike with bare hands because the spike may become fibrous after sun exposure and use.

2. Manually push the Power-Pole to the closed position; this will release all pressure from the up and down hydraulic lines.

NOTE: If the Everflex Spike is not fully resting on the ground at this point be sure to prop up the spike to release pressure.

3. Hydraulic Cylinder: Using a 9/16" wrench turn the compression fitting nut counter clock wise (**FIG. 1**) or use a 8mm open ended wrench to press against the ring of fitting to release. (**FIG. 2**)

IMPORTANT: Wear safety glasses when performing these steps.

4. Repeat Step 3 for the bottom of hydraulic cylinder.

5. Hydraulic Pump: Using a 9/16" wrench turn the compression fitting nut counter clock wise (**FIG. 3**) or use a 8mm open ended wrench to press against the ring of fitting to release. (**FIG. 4**)

6. Remove hydraulic tubing from the Power-Pole unit, taking note of how it is routed to (HPU) hydraulic pump unit and hydraulic cylinder.

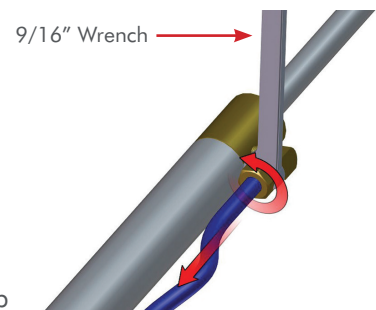


Figure 1

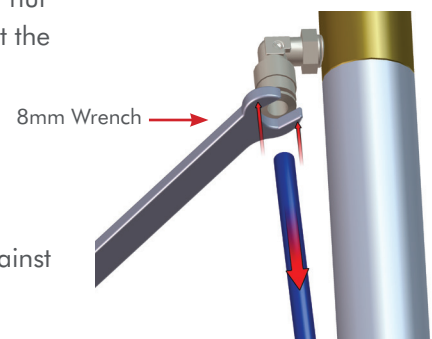


Figure 2

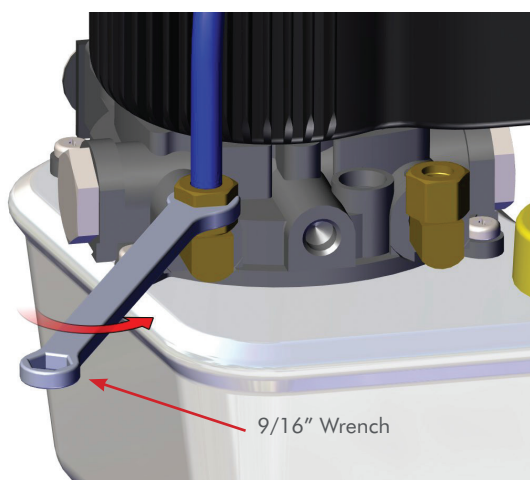


Figure 3

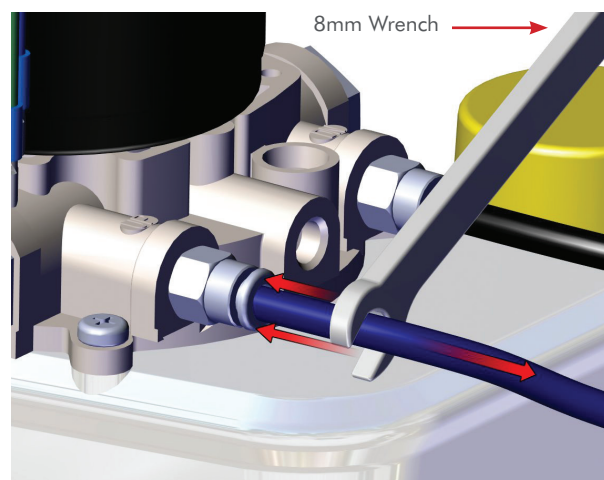


Figure 4

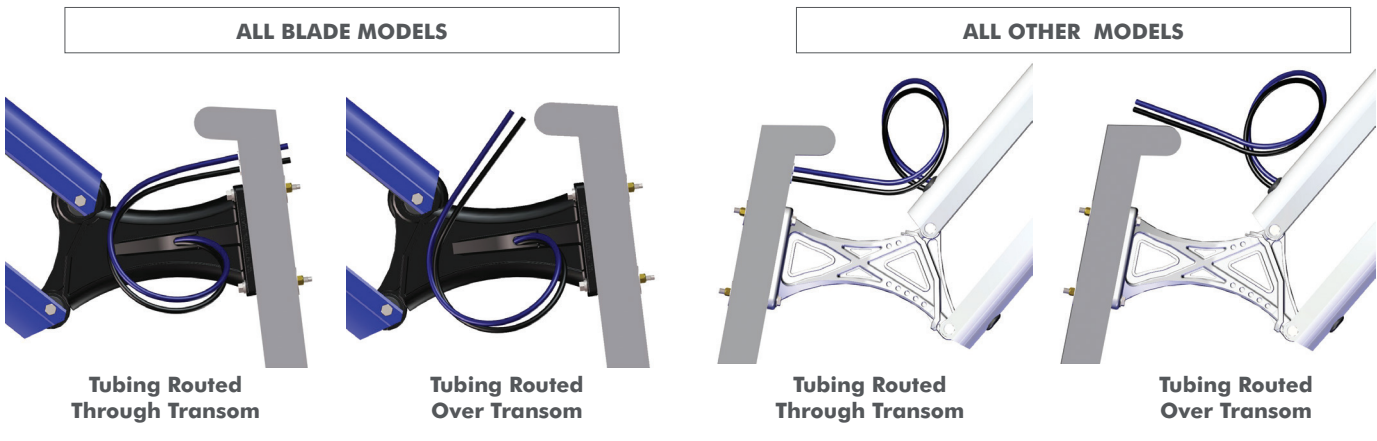
HYDRAULIC TUBING REPLACEMENT

STEP 2: Installation

Route both the blue and black hydraulic tubing to hydraulic cylinder and (HPU) hydraulic pump unit.

WARNING: Keep debris out of the hydraulic tubing. Use the red end caps provided at all times while routing the hydraulic tubing throughout the boat. Debris in the tubing will cause damage to the (HPU) hydraulic pump unit.

NOTE: Route the hydraulic tubing between stern bracket and transom according to the diagrams below for your specific model Power-Pole. The hydraulic tubing needs to have enough slack so that the Power-Pole can fully deploy without damaged the tubing.



STEP 3: Hydraulic Cylinder Fittings

1. With the tubing routed to the cylinder, pull enough slack so that the blue tubing reaches the uppermost compression fitting (**FIG. 1**) or Push-Fit fitting (**FIG. 2**) and the black tubing reaches the lower compression fitting or Push-Fit fitting.

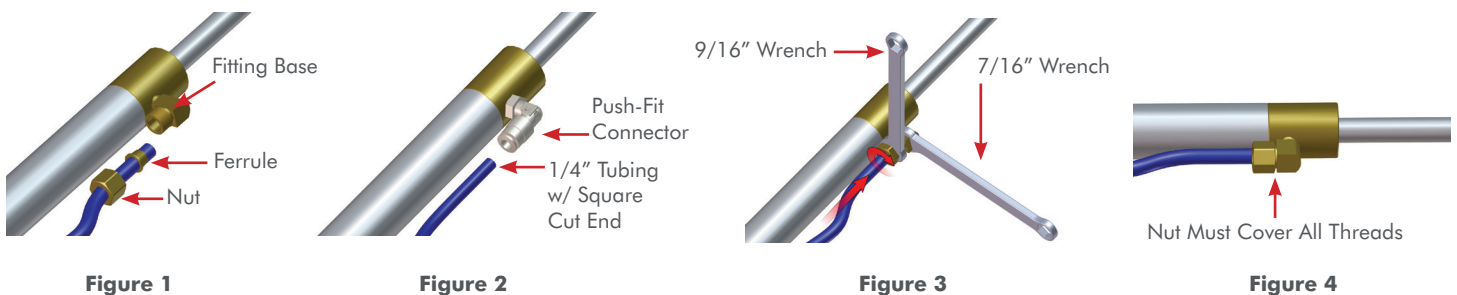
2. With both the blue and black hydraulic tubing in line with their respective fittings push the tubing through the compression fitting nut as well as a compression fitting ferrule (**FIG. 1**) or into the Push-Fit fitting (**FIG. 2**)

IMPORTANT: The tubing needs to pass through the ferrule far enough to expose approximately 1/2" of tubing (**FIG. 1**) and the Push-Fit fitting needs 1/2" of tubing inserted into it with end cut square. (**FIG. 2**)

3. While holding the blue tubing fully inserted into its respective compression fitting base, begin threading the compression fitting nut onto the base. Repeat this step for the black tubing.

4. Tighten both compression fitting nuts with a 9/16" wrench while simultaneously holding their respective bases with a 7/16" wrench. (**FIG. 3**)

WARNING: The nuts must be tightened down far enough such that **NONE** of the compression fitting threads are visible; otherwise, hydraulic failure may occur. (**FIG. 4**)



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STEP 3: (Continued)

5. Once the hydraulic tubing is securely fastened to the fittings, install the cylinder in the anchor, and use marine wire ties to fasten the blue tubing to the cylinder.

IMPORTANT: When installing the cylinder, ensure that the hydraulic fittings are facing towards the vessel. (**FIG. 5**)



Figure 5

STEP 4: HPU Fittings

1. Route the tubing to the HPU according to your preference, and trim the excess using a razor tubing cutter. All cuts made in the tubing must be as square as possible to ensure that the compression fittings do not leak.
2. Push the blue tubing into the compression fitting labeled UP (**FIG. 1**) or the Push-Fit fitting (**FIG. 2**), and the black tubing into fitting labeled DN. While holding the blue tubing fully inserted into its respective compression fitting base, begin threading the compression fitting nut onto the base (**FIG. 1**) Repeat these steps for the black tubing.

IMPORTANT: The tubing needs to pass through the ferrule far enough to expose approximately 1/2" of tubing (**FIG. 1**) and the Push-Fit fitting needs 1/2" of tubing inserted into it with end cut square (**FIG. 2**)

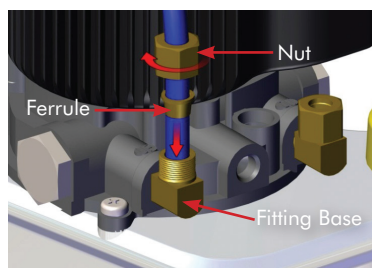


Figure 1

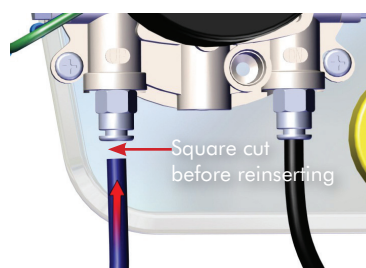


Figure 2

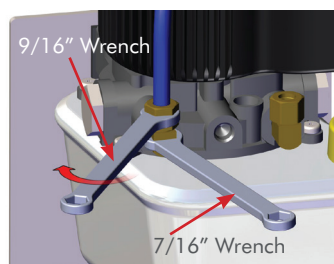


Figure 3

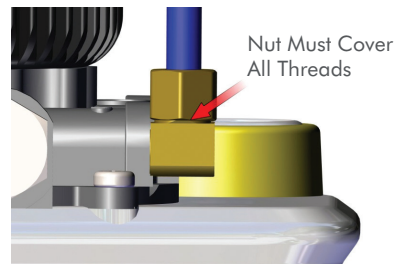


Figure 4

3. Tighten both compression fitting nuts with a 9/16" wrench while simultaneously holding their respective bases with a 7/16" wrench. (**FIG. 3**)

WARNING: The nuts must be tightened down far enough such that NONE of the compression fitting threads are visible; otherwise, hydraulic failure may occur. (**FIG. 4**)

STEP 5: Priming The (HPU) Hydraulic Pump Unit

1. Ensure that both hydraulic lines are securely attached to their respective fittings and that the HPU reservoir is filled to the maximum level. (**FIG. 1**)

IMPORTANT: Use Green Marine biodegradable hydraulic fluid or an ISO 32 hydraulic fluid.

2. Lower the Power-Pole down, and allow the spike to rest on the ground.

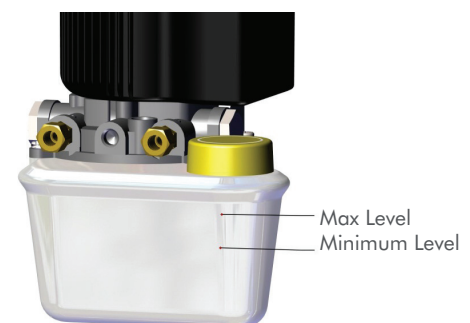


Figure 1

HYDRAULIC TUBING REPLACEMENT

STEP 5: Priming The (HPU) Hydraulic Pump Unit (Continued)

3. Using a 1/2" wrench and ratchet; remove the upper hydraulic cylinder bolt along with all corresponding washers, bushings, and spacers. (**FIG. 2 & 3**)
 4. Allow the hydraulic cylinder to rest inside of the bottom U-Channel while ensuring that the ram can cycle in and out freely without any obstructions.
- NOTE:** If working on a Blade model, the stabilizer bar will need to be folded into the top U-Channel in order for the ram to cycle freely.
5. Using the controller of your choice, hold the "down" button until the ram is fully extended. At this point, continue holding the "down" button for an additional 20 seconds.
 6. Hold the "up" button until the ram is fully retracted, and then allow the pump to run for an additional 20 seconds.
 7. Repeat Steps 5 & 6 three times or until satisfactory performance is achieved.
 8. Replace the upper hydraulic cylinder bolt along with all corresponding hardware by following Steps 2 & 3 in reverse order.
- NOTE:** Lock nut needs to be flush with end of bolt after re-installation.

All Blade Models Exploded View of Top Cylinder Hardware

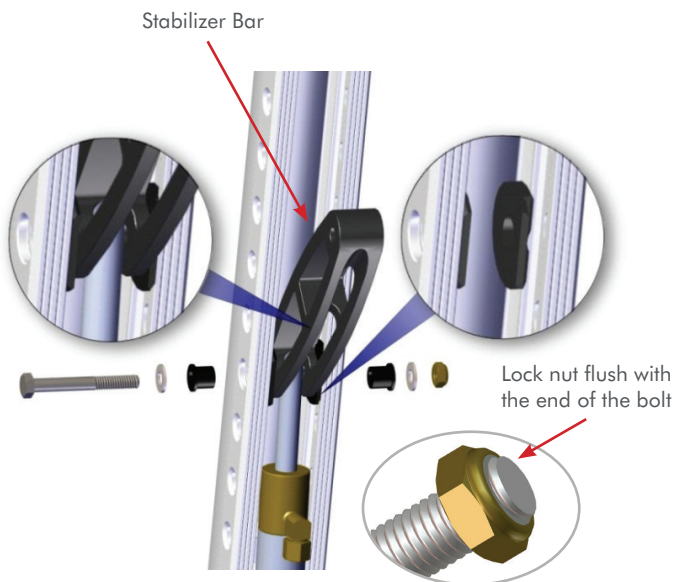


Figure 2

All Power-Pole Models Exploded View of Top Cylinder Hardware (Excluding Blade Models)

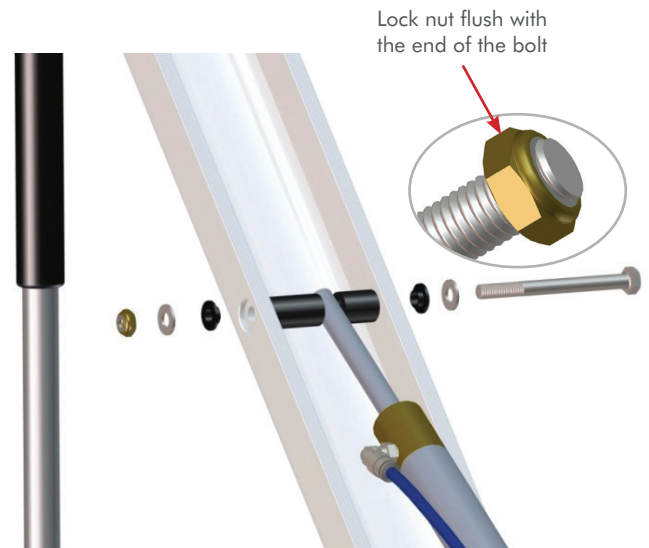


Figure 3

Need help? Contact our Technical Support Team at **1 + 813.689.9932 Option 2**