

OWNER'S INSTRUCTION MANUAL

Power-Pole® Pro Series Shallow Water Anchor

Installation • Operation • Maintenance

POWER-POLE®
SHALLOW WATER ANCHOR

CAUTION: Read this instruction manual carefully. Become familiar with the controls and know how to operate the Power-Pole shallow water anchor system safely.

US Pat No. 6,041,730



CONGRATULATIONS on your purchase of a Power-Pole Pro Series shallow water anchor system. It has been designed, engineered, and manufactured to provide the best possible performance and dependability for years of enjoyment.

Please read and retain this manual. The information contained in this manual describes the proper procedures for safely installing, operating and maintaining your Power-Pole Pro Series shallow water anchor.



CAUTION:

Do not use the Power-Pole shallow water anchor as your primary anchorage. Never leave your boat unattended while anchored solely with the Power-Pole shallow water anchor.

TRAINING

- Read this operator's manual carefully. Become familiar with the controls and know how to operate your Power-Pole shallow water anchor properly.
- Do not allow children to operate the Power-Pole shallow water anchor without adult supervision.
- Do not modify the unit in any way or add accessories not intended for this unit.
- Always disconnect power from Power-Pole shallow water anchor before servicing.

OPERATION

- In the event of pump failure the Power-Pole shallow water anchor may be manually raised by applying enough pressure to bypass the pole protector valve thus allowing the unit to come all the way up to the stowed position. If the Power-Pole shallow water anchor is beyond reach it can be forced up by driving the boat forward to shallower water. Depressing the up button on the Power-Pole shallow water anchor control may offer assistance. **DO NOT TOUCH THE SPIKE.**
- Be sure to have the Power-Pole shallow water anchor in the full up position when using outboard motor at high speeds.
- Keep your hands and clothing completely clear of the Power-Pole shallow water anchor at all times.
- Do not use the Power-Pole shallow water anchor as a step or handle to enter or exit the boat.
- Never allow children to play with or around the Power-Pole shallow water anchor.
- Never leave your boat unattended with the Power-Pole shallow water anchor as the primary anchorage.
- In high wind or rough seas the Power-Pole shallow water anchor may relieve holding pressure to protect your boats transom.
- If any debris gets caught around the Power-Pole shallow water anchor, DISCONNECT power from motor and remove debris.

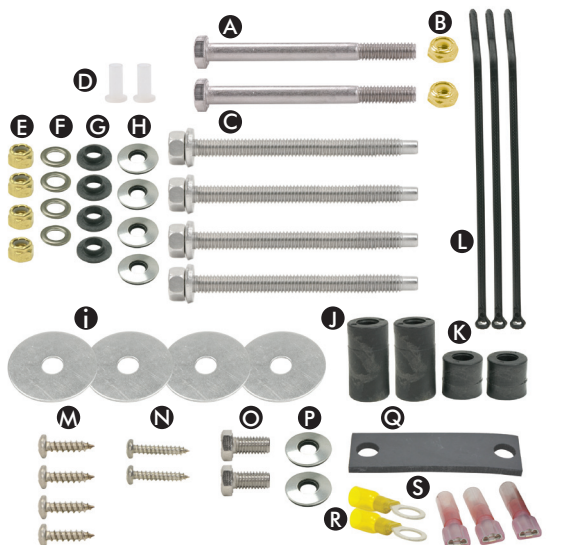
MAINTENANCE AND STORAGE

- **CAUTION** – Hydraulic lines always have pressure, disconnecting the lines will cause sudden high pressure leakage and Power-Pole shallow water anchor failure which may cause bodily harm.
- Inspect all hydraulic line fittings between usage for proper tightness to be sure there are no leaks.
- Make sure all power connections are secure and free of corrosion once every three months.
- Inspect all nuts, bolts and screws after 100 cycles of usage for proper tightness to be sure the Power-Pole shallow water anchor is in safe working condition. **Note:** 1/2" Lock nuts at top knuckle joint and 1/2" lock nuts for hydraulic cylinder should be tightened to 48 inch pounds / 4 foot pounds of torque. The 9/16" lock nuts on stern bracket should be tightened to 84 inch pounds / 7 foot pounds of torque. Once tightened if Power-Pole is still loose replace bushings.
- Inspect all hydraulic lines between usage for possible chaffing or damage from kinking or abrasion.
- Keep the hydraulic reservoir filled within the indicator marks at all times.
- Thoroughly rinse all moving parts after each use.
- Always make sure the Power-Pole shallow water anchor is in the full up position when the boat is on the trailer.
- Lubricate the hinge bushings with a spray Lithium Grease to prevent the unit from squeaking as needed.

Installation Tools & Hardware

- 1/2 & 9/16 Wrenches, Sockets and Ratchet
- Electric or Battery Operated Drill
- Four Foot Straight Edge
- Marine Grade Sealant
- Tape Measure
- Wire Cutters
- Wire Crimpers
- Razor Tubing Cutters
- Small Funnel
- 9/64 & 5/16 Drill Bits
- #2 Phillips Head Bit or Screwdriver
- Jig Saw or Rotary Saw

- A** Qty(2) 5/16 x 3.5" cylinder ram bolt
- B** Qty(2) 5/16 low-profile brass lock nuts
- C** Qty(4) 5/16 x 3.5" all-thread transom mount bolts
- D** Qty(2) thru-hull bushings
- E** Qty(4) 5/16 tall brass lock nuts
- F** Qty(4) small OD washers
- G** Qty(4) cylinder ram bolt bushings
- H** Qty(4) 5/16 neo-bond washers
- I** Qty(4) 5/16 fender washers
- J** Qty(2) large cylinder ram spacers
- K** Qty(2) small cylinder ram spacers
- L** Qty(3) marine wire ties
- M** Qty(4) #10 wood screws
- N** Qty(2) #6 wood screws
- O** Qty(2) 3/8 mounting bolt
- P** Qty(2) 3/8 neo-bond washers
- Q** Qty(1) mounting gasket
- R** Qty(2) ring connectors
- S** Qty(3) wire plug connectors
- T** Qty (1) 5ft black mesh tubing cover



Step 1: Choose a Mounting Location

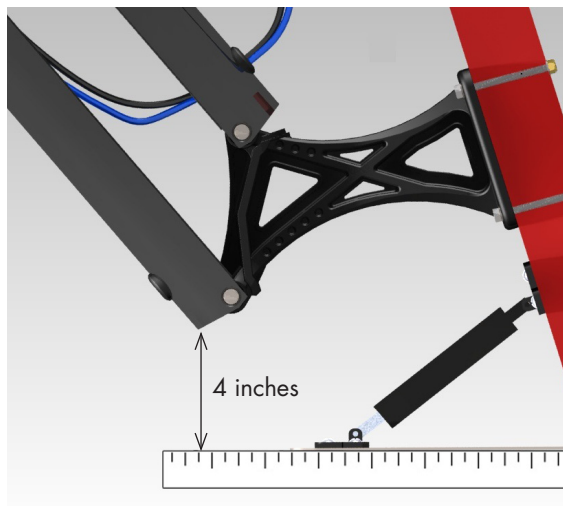
Transom mount option

Vertical Positioning

1. Place a straight edge on the bottom of the hull directly below and centered from the desired mounting location.
2. The lowest point of the Power-Pole shallow water anchor will need to be at least 4" above this straight edge. If the Power-Pole shallow water anchor is mounted lower than the 4" minimum the vessel may experience adverse handling effects.

Clearance

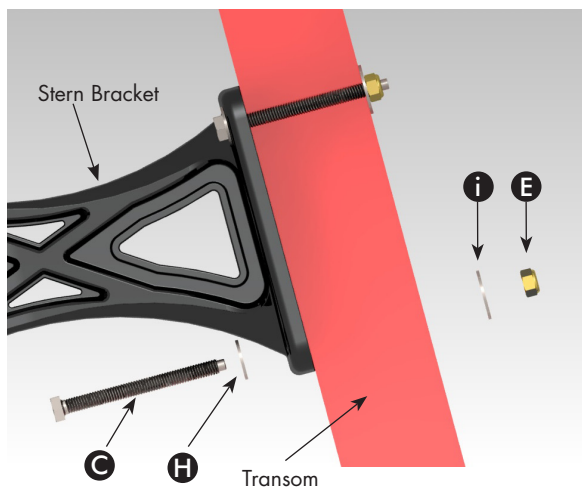
1. If the vessel is equipped with trim tabs make sure the Power-Pole shallow water anchor will not interfere with the actuators or the tabs themselves.
2. If the vessel is equipped with 9" or less trim tabs the standard 4" minimum mounting height will clear the tab. If the tabs are larger than 9" the Power-Pole shallow water anchor will need to be mounted higher to prevent interference.
3. Turn and tilt the outboard motor all the way in the direction of the Power-Pole shallow water anchor. Move the Power-Pole shallow water anchor and outboard through their entire range of motion to verify clearance.



Step 2: Mounting the Power-Pole®

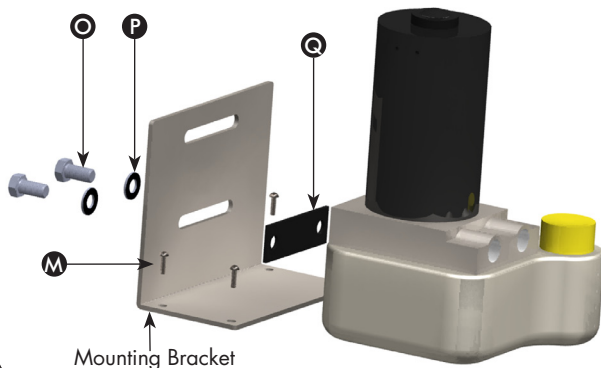
IMPORTANT — Carefully inspect and confirm your desired mounting location **BEFORE** mounting the stern bracket.

1. Double check the clearance for adequate space on the inside of the transom mounting area to make sure that the bolts will not have any obstructions. Also, be sure that you will have plenty of room to tighten the nuts on the inside.
2. Once the mounting location has been selected, place the stern bracket against the transom and mark the mounting holes.
3. Carefully drill the marked holes with a 5/16" drill bit ensuring clearance on the inside of the transom.
4. Once all of the holes have been marked and drilled use a marine grade sealant between the stern bracket and the hull as well as around the bolts and holes.
5. Fasten the stern bracket to the transom using the listed hardware. The rubber backed neo-bond washers are to protect the powder coated surface of the stern bracket. **DO NOT OVER TIGHTEN.**



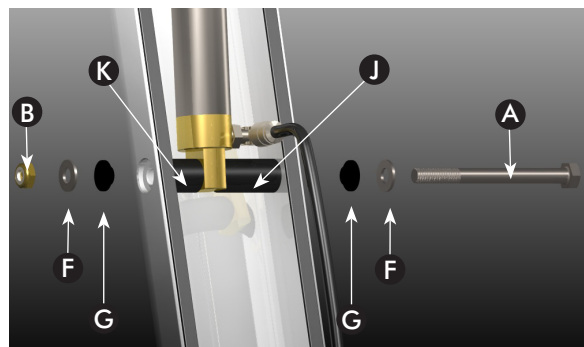
Step 3: Hydraulic Pump Unit (HPU)

1. Install the HPU in a suitable, dry location that is not prone to constant drenching or submersion.
2. Using the supplied mounting bracket and (4) #10 screws **M**, mount the bracket in the selected location.
3. Mount the pump to the bracket using the supplied hardware **O P Q**.
NOTE: the pump bracket can also be wall mounted.
4. Be sure to keep protective caps over the pre-installed fittings to keep the HPU free of debris.



Step 4: Installing Hydraulic Cylinder

1. Install the cylinder with the stainless steel ram towards the top of the Power-Pole shallow water anchor.
2. Using the supplied hardware and spacers mount the cylinder and ensure proper placement of the ram spacers. The larger ram spacer should be on the same side of the cylinder as the fittings.
3. Do not connect the ram end of the cylinder at this time. This will be done at the final step after the pump has been primed.



Step 5: Hydraulic Tubing

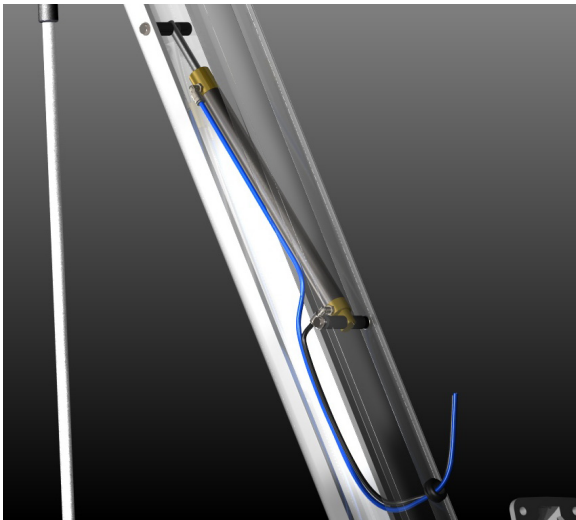
Routing & Installation

1. The hydraulic tubing can be routed over or through the transom. If the tubing is being installed through the transom, drill (2) 5/16" holes above the water line close to the stern bracket and insert the (2) thru-hull bushings provided **D**.

WARNING – Keep all debris out of hydraulic tubing.

Use the red end caps provided when routing through the boat at all times. Debris in the tubing can cause damage to the pump.

2. Once the hydraulic lines have been routed through or over the transom, insert the black and blue hydraulic tubes through the black mesh tubing cover **T** and then through the rubber grommet on the lower portion of the upper U-Channel.
3. Allow enough slack in the hydraulic tubing to make an 8" to 10" loop between the rubber grommet and the entry point of the transom. This will provide enough slack in the hydraulic lines to allow for full up and down operation of the Power-Pole shallow water anchor.



4. Remove the blue dust cap from the upper fitting on the cylinder, insert the blue tube into the upper fitting on the cylinder. Remove the black dust cap and insert the black tube into lower fitting on the cylinder. Use the (2) provided marine wire straps **L** to secure the upper blue line to the cylinder to prevent pinching during use.

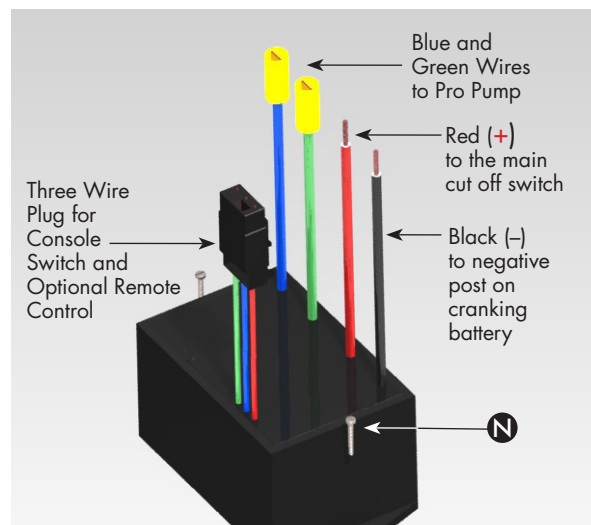
Hydraulic Tubing (continued)

5. The tubing is now ready to be inserted into the HPU fittings. Trim the excess tubing using a razor tubing cutter.
6. Remove the dust caps from the HPU. Insert the Black tubing into the fitting labeled DN (black cap) and the Blue tubing into the fitting labeled UP (blue cap).

IMPORTANT — Once the lines have been routed through the rubber grommet and connected to the hydraulic fittings on the HPU and the cylinder, move the Power-Pole shallow water anchor through the entire range of motion to make sure the lines are not going to kink, chafe, or otherwise be damaged during normal use.

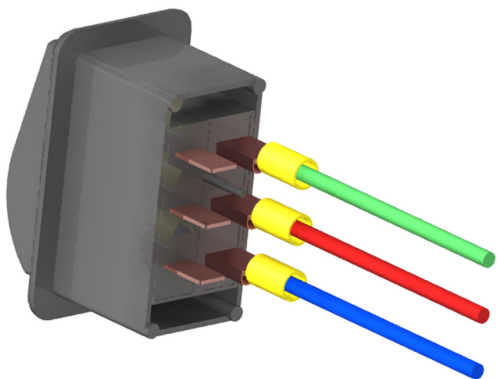
Step 6: Reversing Relay

1. We recommend connecting the red (+) to the main battery cut-off switch and the black (-) to the negative post on the cranking battery using the (2) yellow ring connectors **R** provided. Plug the blue and green wires from the reversing relay into the blue and green wires on the HPU. Match the three wire plug on the reversing relay to the console switch wiring harness.

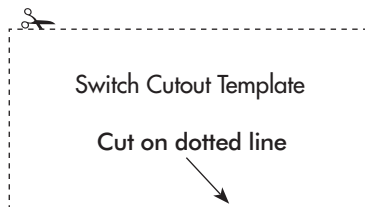


Step 7: Console Switch

1. Using the connectors supplied **S**, connect the red, green and blue wiring harness to the switch as indicated.



Remove this cutout from your manual and tape to your console at the desired switch location. Using a fiberglass cutting blade cut on the outside edge of the switch cutout template.



Step 8: Priming the Pump

Priming the pump

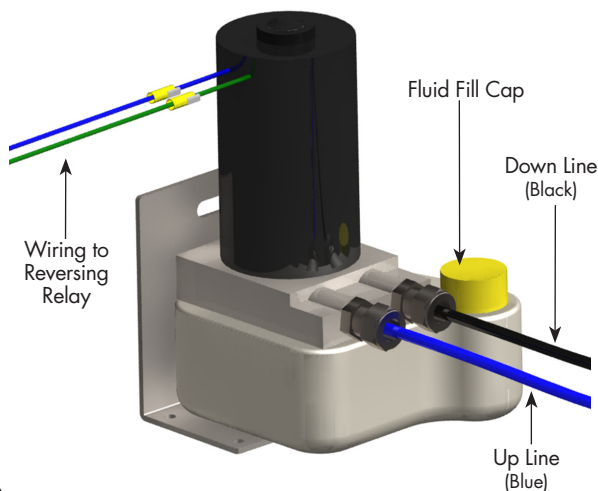
1. After the hydraulic lines and wiring harness have been installed, remove the fill cap and fill the pump to the FULL line with the provided quart of Green Marine® biodegradable hydraulic fluid. If refilling and Green Marine® is not available Automatic Transmission fluid is acceptable.



Warning: Using any other hydraulic fluid may damage your hydraulic pump and void your warranty.

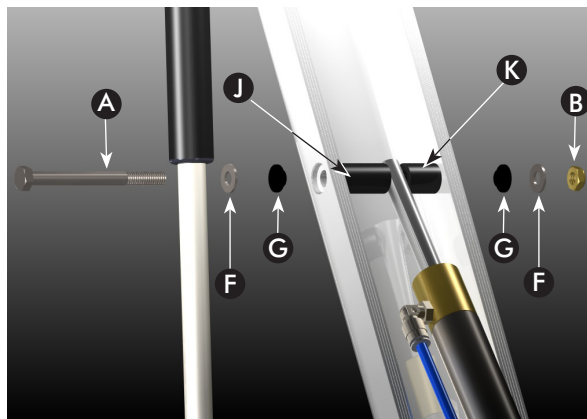
Priming the Pump (continued)

2. Using the rocker switch, cycle the cylinder from fully retracted to fully extended several times. Hold at stall for (2) seconds in each direction to clear any remaining air from the system.
3. HPU fluid level may need to be checked after final priming has been completed.



Step 9: Final Assembly

1. Using the left over 5/16 bolt **A** and hardware, attach the cylinder ram to the U-Channel with the large ram spacer on the same side as the fitting.



FIVE (5) YEAR LIMITED WARRANTY

Power-Pole® Pro Series shallow water anchor

Conditions of this Warranty

A Power-Pole Professional Series shallow water anchor manufactured by JL Marine systems Inc. is warranted against defects in material and workmanship in the stern bracket, U-channels, Knuckle joint, hydraulic system, and electrical system, to the original end consumer from the original purchase date, according to the following stipulations:

1. Power-Pole Professional Series shallow water anchor warranties are activated upon receipt by JL Marine Systems, Inc. of the completed warranty card, postdated within (10) days of the original purchase date or by registering your Power-Pole on our website. Please retain your sales receipt as proof of purchase.
2. Install Genuine Power-Pole Merchandise ONLY. This warranty is void if any non authorized parts are used or installed.
3. This warranty is void if the Power-Pole Professional Series shallow water anchor is used commercially, structurally altered or subject to stress beyond the physical limits of the manufactured material.
4. This warranty does not cover abrasion or abnormal abuse, nor does it cover the Power-Pole shallow water anchor for anything other than its intended use.
5. JL Marine Systems, Inc. reserves the right to change products and designs without incurring any obligations to incorporate such changes in already completed products, or those in the hands of dealers or consumers. Products repaired or replaced under this warranty may or may not have these changes.

Shipping (Only applies to packages shipped within the Continental U.S.)

1. Parts which prove defective within (90) days from the date of purchase, JL Marine Systems, Inc. will pay for the replacement product shipping and handling fees to and from the JL Marine Systems, Inc. manufacturing plant or some other place which JL Marine Systems, Inc. might designate.
2. Parts which prove defective after (90) days but before (12) months from the date of purchase will also be repaired or replaced free of charge, but there may be a shipping charge to JL Marine Systems, Inc. manufacturing plant or some other place which JL Marine Systems, Inc. might designate.
3. Parts which prove defective after (12) months will also be repaired or replaced free of charge, but there may be a shipping and handling charge to and from the JL Marine Systems, Inc. manufacturing plant or some other place which JL Marine Systems, Inc. might designate.

Parts

1. A **Stern bracket, U-channel, or Knuckle joint**, which proves defective before sixty (60) months, will be repaired or replaced free of charge. In the case of replacement, parts of same (or equivalent) model will be used.
2. The **Hydraulic Power Unit (Pro/Stealth Pump)** which proves defective within (18) months from date of purchase will be repaired or replaced free of charge. Pump damage due to incorrect hydraulic fluid, submersion or excessive exposure to water may void this warranty.
3. The **American Marine Finish** is covered for a period of six (6) months not to crack, chip or fade.
4. A **Cylinder or tubing** which proves defective within (18) months from date of purchase will be repaired or replaced free of charge. In the case of replacement, parts of same (or equivalent) model will be used.
5. A **reversing relay, switches, or wiring harness** which proves defective within (18) months from date of purchase will be repaired or replaced free of charge.
6. **Spike** unconditional lifetime guarantee.
7. **This Warranty does not cover water damage in any way.**

THE WARRANTY CONTAINED HEREIN IS THE EXCLUSIVE WARRANTY MADE BY JL Marine Systems, Inc. AND THERE ARE NO OTHER WARRANTIES, EXPRESSED OR IMPLIED, INCLUDING A WARRANTY OF FITNESS FOR A PARTICULAR PURPOSE OR OF MERCHANTABILITY MADE WITH RESPECT TO SUCH ANCHORS. JL MARINE SYSTEMS, INC. IS NOT LIABLE FOR ANY INJURY OR MISHAPS SUSTAINED IN THE USE OF THIS PRODUCT. THE USER OF THIS PRODUCT ACKNOWLEDGES ASSUMED RISKS AND WAIVES ANY AND ALL CLAIMS AGAINST JL Marine Systems, Inc. AND ANY OF IT'S AGENTS.

This warranty applies under conditions of normal use. The warranty does not cover: 1) defects caused by improper assembly or disassembly; 2) defects occurring after purchase due to product modification, intentional damage, accident, misuse, abuse, negligence or exposure to corrosive elements; 3) cosmetic damage and 4) labor or assembly costs.

Except as provided herein, JL Marine Systems, Inc. makes no express warranties, and any implied warranty, including without limitation any implied warranty of merchantability or fitness for a particular purpose, is limited in its duration to the duration of the written limited warranty set forth herein.

Except as provided herein, JL Marine Systems, Inc. shall have no liability or responsibility to the purchaser or any other person or entity with respect to any liability, loss or damage caused or alleged to be caused directly or indirectly by use of the product, including, but not limited to, any incidental or consequential damages. Some states do not allow limitation on how long an implied warranty lasts or the exclusion of limitation of incidental or consequential damages, so the above limitation and exclusion may not apply to you. This warranty gives you specific legal rights. You may also have other rights which vary from state to state.



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