

# INSTALLATION MANUAL

## Power-Pole® Blade Edition Shallow Water Anchor




**Blade**<sup>TM</sup>

Installation Instructions



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 Blade Edition shallow water anchor featuring C-Monster Control System. It has been designed, engineered, and manufactured to provide the best possible performance and dependability for years of enjoyment.

Please read all installation instructions carefully. The information contained here describes the proper procedures for safely installing your Power-Pole 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.

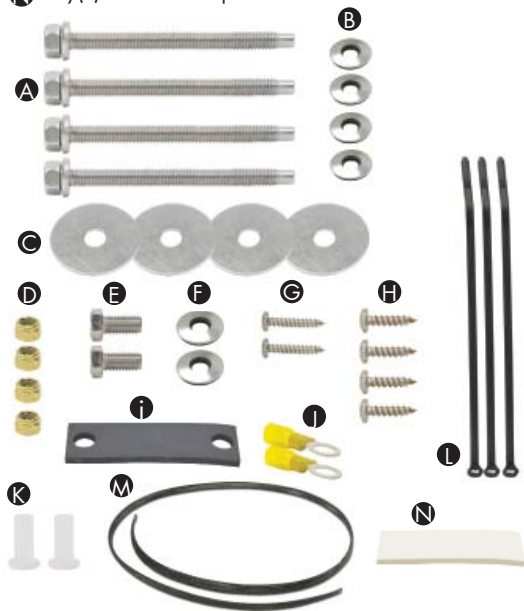
## Installation Tools & Hardware

### Installation Tools

- 1/2" & 9/16" wrenches
- 1/2" & 9/16" sockets with ratchet
- Electric or battery operated drill
- 7/64", 9/64", 11/32", 5/16" & 1/8" drill bits
- #2 Phillips-head bit or screwdriver
- Small slotted (flat-headed) screwdriver
- Heat gun
- 4' foot straight edge
- Marine grade sealant
- Fine point marker
- Tape measure
- Wire cutters
- Wire strippers
- Wire terminal crimpers
- Razor tubing cutter or utility razor blade
- Small funnel

### Installation Hardware

- A** Qty(4) 5/16" x 3.5" all-thread transom mount bolts
- B** Qty(4) 5/16" neo-bond washers
- C** Qty(4) 5/16" fender washers
- D** Qty(4) 5/16" tall brass nuts
- E** Qty(2) 3/8" x 3/4" bolts
- F** Qty(2) 3/8" neo-bond washers
- G** Qty(2) #8 x 3/4" flat head screws
- H** Qty(4) #10 x 3/4" pan head screws
- i** Qty(1) rubber pump gasket
- J** Qty(2) ring connectors
- K** Qty(2) thru-hull bushings
- L** Qty(3) marine cable ties
- M** Qty(1) 5' black mesh tubing cover
- N** Qty(1) adhesive strip



## Step 1: Choose a Mounting Location

### Transom mounting

#### VERTICAL POSITIONING

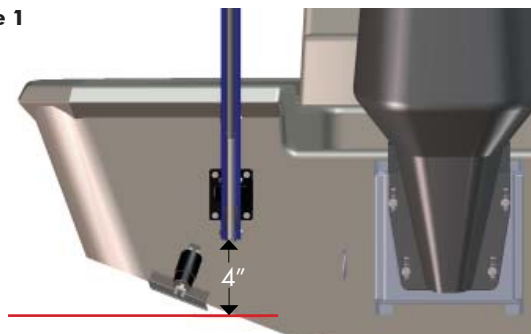
1. Place a straight edge on the bottom of the hull directly below and centered from the desired mounting location. The lowest point of the Power-Pole anchor must be at least 4" above this straight edge.

**NOTE:** If the Power-Pole anchor is mounted lower than the 4" minimum, the vessel may experience adverse handling effects. (Figure #1)

#### CLEARANCE

1. If the vessel is equipped with trim tabs that measure 9" or less in length, the standard 4" minimum mounting height will be sufficient. If the trim tabs are larger than 9", the Power-Pole anchor will need to be mounted higher up on the transom to prevent interference.
2. While holding the Power-Pole anchor in place, turn and tilt the motor as far as possible toward the unit. With the motor turned toward the unit, manually move the anchor through its entire range of motion to verify clearance.
3. Once clearance has been verified on the exterior portion of the vessel, check for adequate space on the inside of the transom mounting area. Make sure that the bolts will not have any obstructions, and that you will have space to tighten the 5/16" tall brass nuts **D**.

Figure 1



### Adapter plate mounting

1. Please contact one of our authorized dealers or visit **power-pole.com** and click on "Find your Adapter Plate." For technical support call **(813) 689-9932 option 2**

## Step 2: Mounting the Power-Pole®

1. **Transom mounting:** The hydraulic tubing can be routed through either side of the stern bracket. (Figure #2A)

**Adapter plate mounting:** The hydraulic tubing can be re-routed through the center of the stern bracket. (Figure #2B)

**NOTE:** For ease of routing feed one line at a time. **BE SURE THERE ARE NO KINKS IN THE TUBING.**

**Figure 2A Side Routing**  
(for Transom Mounting)

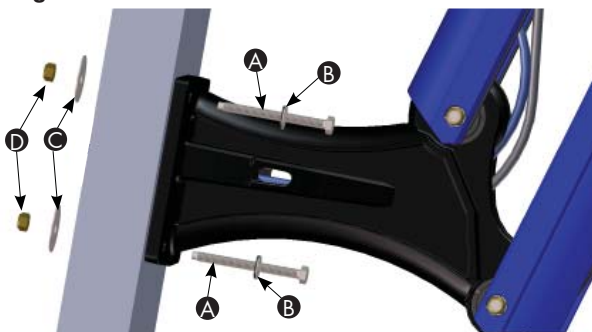


**Figure 2B Center Routing**  
(for Adapter Plate Mounting)



2. Once the tubing has been re-routed and the mounting location has been selected, place the stern bracket against the transom, and mark the mounting holes with a fine point marker.
3. Drill a pilot hole into each of the four marked locations with a 9/64" drill drill bit.
4. Apply a liberal amount of marine grade sealant between the stern bracket and the hull, as well as around the 5/16" holes.
5. With a 1/2" wrench and 1/2" socket, fasten the stern bracket to the transom using (4) 5/16" x 3.5" all-thread transom mount bolts **A**, (4) 5/16" neo-bond washers **B**, (4) 5/16" fender washers **C**, and (4) 5/16" tall brass nuts **D**.  
The rubber backed neo-bond washers **B** will protect the powder coated surface of the stern bracket, and they must not be over tightened. (Figure #3)

**Figure 3**



## Step 3: Hydraulic Pump Unit (HPU)

### Choose a mounting location

1. Locate a dry compartment in the vessel with ample space to accommodate the HPU. The footprint of the HPU is approximately 6.5"x 7".

**NOTE:** Be sure to allow enough clearance surrounding the HPU such that the hydraulic tubing will not make a severe bend when exiting the compartment. Also, allow enough space to install the (2) 3/8" x 3/4" bolts **E** through the mounting bracket and into the HPU.

## Step 4: Installing the HPU

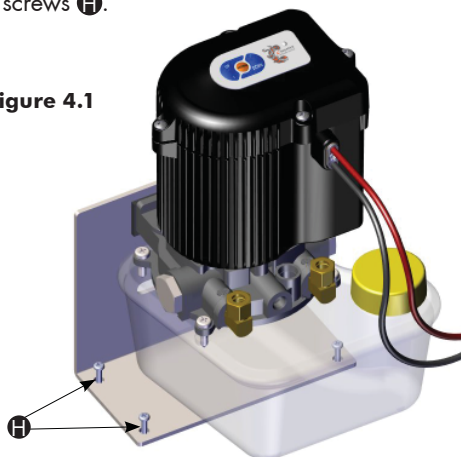
1. Remove the fill cap on the HPU, and fill the reservoir to the "full" line with the supplied quart of Green Marine® biodegradable hydraulic fluid or an ISO 32 hydraulic fluid.
2. Place the HPU bracket in the predetermined area of the vessel and mark the four mounting hole locations with a fine point marker.

**WARNING:** Using anything other than an ISO 32 hydraulic fluid, such as Green Marine, may cause damage to the HPU, and will void your warranty.



3. Drill a hole into each of the marked hole locations with a 9/64" drill bit.
4. Fasten the bracket to the vessel using a #2 Phillips-head screwdriver and the (4) #10 x 3/4" pan head screws **H**.

**Figure 4.1**



## Step 4: Continued

- Once the bracket is securely fastened, use a 9/16" wrench to attach the HPU to its bracket using the (2) 3/8" x 3/4" bolts **E**, (2) 3/8" neo-bond washers **F**, and (1) rubber pump gasket **I**. (Figure #4.1 and 4.2)

Figure 4.2



- Route the red wire to a 12 volt positive source via a battery switch, and route the black wire to a 12 volt negative source via a common ground post.

**NOTICE:** This HPU will draw current (40 mA) from the battery source when not in use. JL Marine Systems, Inc. strongly recommends the use of a battery disconnect switch.

- Once the wires have been trimmed to length with wire cutters, install the (2) ring connectors **J** using wire strippers and wire terminal crimpers.
- Heat the (2) ring connectors **J** with a heat gun until their respective jackets shrink completely and adhere to the wires.

**WARNING:** DO NOT CONNECT the red or black wire at this time. These wires will be connected once the hydraulic tubing is installed.

## Step 5: Installing Hydraulic Tubing

- Guide the blue and black hydraulic tubing through the black mesh tubing cover **M**.

**NOTE:** The black mesh tubing **M** cover may need to be trimmed to length.

**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.

## Step 5: Continued

- The hydraulic tubing may be routed in one of two ways. It may be routed either over the transom or through the transom using the (2) supplied thru-hull bushings **K**. If the hydraulic tubing is not being installed through the transom, route the tubing to the HPU as per your preference, and proceed to Number 4 below. If the hydraulic tubing is to be installed through the transom, holes will need to be drilled for the thru-hull bushings **K**.

**NOTE:** When choosing a location for the holes, ensure that the tubing will form a natural curve when leaving the stern bracket, and that the transom holes will be above the water line.

- Drill pilot holes in the transom with a 9/64" drill bit for each of the (2) thru-hull bushings **K**. Then, drill out both pilot holes with an 11/32" drill bit. Insert the (2) thru-hull bushings **K**, and route the tubing to the HPU. (Figure #2A)

**Note:** Be sure to allow an adequate amount of slack in the hydraulic tubing between the stern bracket and the point that the tubing enters the vessel. This will provide slack in the hydraulic lines to allow for full up and down operation.

- Now trim the excess tubing with a razor. All cuts made in the tubing must be as straight as possible to ensure that the compression fittings do not leak.

**Note:** For ease of future maintenance, leave enough excess hydraulic tubing such that the HPU can be moved out of the compartment with the tubing still attached.

- While taking note of their location, remove the blue and black dust caps from the hydraulic compression fittings on the HPU.
- Push the blue tubing into the compression fitting labeled UP (blue dust cap), and the black tubing into fitting labeled DN (black dust cap). 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. (Figures #5 & #6)

**Note:** The tubing needs to pass through the ferrule far enough such that there is approximately a 1/2" length of tubing exposed. (Figure #5)

## Step 5: Continued

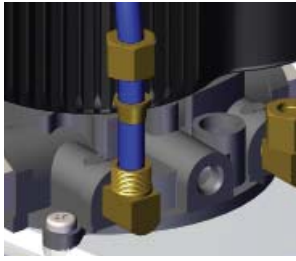


Figure 5

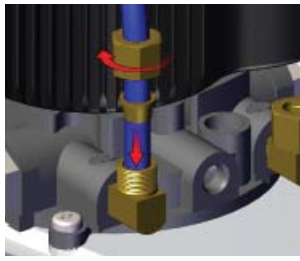


Figure 6

8. Tighten both compression fitting nuts with a 9/16" wrench while simultaneously holding their respective bases with a 1/2" wrench. (Figure #7)

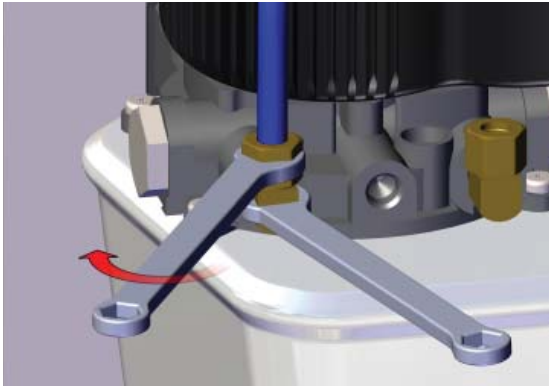
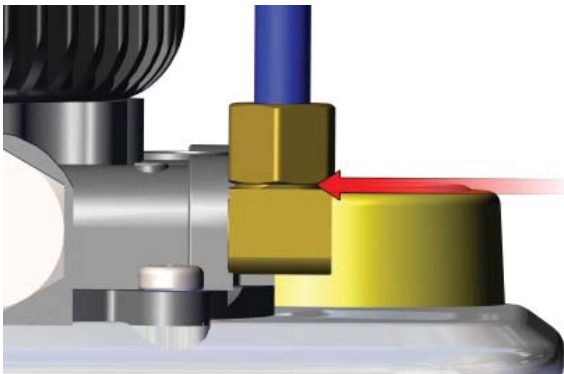


Figure 7

**Warning:** The nuts must be tightened down far enough such that none of the compression fitting's threads are visible; otherwise, hydraulic failure may occur. (Figure #8)



## Step 6: Priming the HPU

1. Now connect the red and black wires from the HPU to their respective locations.  
Once both wires are securely fastened, the green LED on the HPU should flash indicating that the unit has power.
2. Use the "down" button on the HPU to deploy the Power-Pole anchor to the point where it makes contact with a solid surface. Keep the "down" button depressed for 10 seconds in order to bleed all residual air from the hydraulic tubing. (Figure #9)

Figure 9



3. Use the "up" button on the HPU to retract the Power-Pole anchor from the deployed position to the stowed position. Keep the "up" button depressed for 10 seconds in order to bleed all residual air from the hydraulic tubing. Repeat step 2 & 3 three times or until satisfactory performance is achieved.
4. The HPU's hydraulic fluid level may need to be topped-off after the final priming has been completed.



## Step 7: Programming Dual Units

**NOTE:** Anchors are preprogrammed as a single unit. When using only one anchor, do not program as a port or starboard.

1. Using the “up” and “down” buttons on both HPUs, determine which HPU controls the port side Power-Pole anchor and which one controls the starboard side. (Figure #10)

**Figure 10**



2. With both HPUs identified, begin with the starboard side unit. Locate the “program” button on the top of the HPU, and depress and hold it for 6 seconds until LED flashes red and two chimes are heard followed by a single beep.
3. Next, depress and release the “up” button for the starboard side HPU. The LED will flash red 1 time with a single beep indicating that the HPU has been assigned as the starboard side unit. Press and release the program button to save and exit. The LED will flash red 1 time with a single beep followed by two consecutive beeps.
4. On the port side, repeat Step 2 to enter programming mode. Next, depress and release the down button on the HPU. The LED will flash red twice with two consecutive beeps indicating that the programming has been completed successfully, and the HPU has been assigned as the port side unit. Press and release the program button to save and exit. The LED will flash red 2 times with a double beep followed by two consecutive beeps.

**NOTE:** For addition menu settings please refer to the Owner Guide.

## Step 8: Pairing Dual Units to a Single Wireless Controller

**NOTE:** The Power-Pole comes paired to the included Dash Switch and Key Fob remotes. When installing dual units, you can program a single Dash Switch and/or Key Fob remote to control both units. To operate both units with one controller follow Steps 1–4.

1. Determine which unit is paired with the controller by pressing the UP or DOWN button.
2. Locate the “program” button on the top of the HPU, depress and hold it for 3 seconds until the LED turns solid green in color and a single beep is heard.
3. Next, depress and release either the up or down button on the switch. The green LED on the pump unit will turn off and a single beep will confirm that the pairing has been completed. The programming light should now flash steadily green. (Figure #11)
4. The switch is now paired to the pump units. Test by pressing and holding the UP or DOWN button on the controller until both units respond.

**Figure 11**



## Step 9: Installing the Dash Switch

1. Locate a suitable area with a flat surface to mount the dash switch.
2. Mark and drill a pilot hole with 1/8" drill bit to fasten switch using the (2) screws **G** supplied (do not over tighten). Or you may choose to use adhesive strip **N** also supplied.



Need help? Contact our Technical Support Team at  
**813.689.9932 option 2**



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