

OWNER'S MANUAL

INSTALLATION - OPERATION - MAINTENANCE



STANDARD PUMP SYSTEM

Powered By: Bennett Hydraulics

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

US PAT NO. 6,041,730







To obtain warranty service, take or ship your *Power-Pole* TM to JL Marine Systems, Inc or to a JL Marine Systems Inc. authorized service station, together with a note describing your complaint and your copy of the dated purchase receipt. If you choose to ship your *Power-Pole* TM to JL Marine or an authorized service station, all shipping arrangements must be made by you and all shipping charges and insurance must be fully prepaid. All to and from shipping charges for JL Marine systems, Inc. products which have been serviced under this Warranty within ninety (90) days of the purchase date may be reimbursed by JL Marine.

Keep this information for your records

Model	-
Serial No	_
Customer's Name	-
Place of purchase	-
Date of Purchase	_



JL MARINE SYSTEMS, INC. 9208 PALM RIVER ROAD SUITE 303 TAMPA, FL 33619

(813) 689-9932

CONGRATULATIONS on your purchase of a **Power-Pole™ Shallow Wa**ter Anchor system. It has been designed, engineered, and manufactured to give you the best possible dependability and performance for years of enjoyment.

Please read and retain this manual. The information contained in the manual describes the proper procedures for safely installing, operating and maintaining your *Power-Pole*[™].

CAUTION: Do not use the *Power-Pole*[™] as your primary anchorage. Never leave your boat unattended while anchored with the *Power-Pole*[™].

TRAINING:

- Read this operator's manual carefully. Become familiar with the controls and know how to operate your Power-Pole™ properly.
- Do not allow children to operate the Power-Pole[™] 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[™] before servicing.

PREPARATON:

- Always make sure the Power-Pole[™] is in the full up position with a travel strap in place when on the trailer.
- If any debris gets caught around the Power-Pole™, DISCONNECT power from motor and remove any debris.

OPERATION

- In the event of pump failure the Power-Pole™ 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™ is beyond reach it can be forced up by driving the boat to shallower water. Depressing the up button on the Power-Pole™ control may offer assistance.
- Be sure to have the Power-Pole[™] in the full up position when using outboard motor at high speeds.
- Keep your hands and clothing completely clear of the Power-Pole[™] at all times.
- Do not use the Power-PoleTM as a step or handle to enter or exit the boat.
- Never allow children to play with or around the Power-PoleTM.
- The Power-Pole[™] is fully powered, never give any assistance to raise or lower.
- In high wind or rough seas the Power-Pole[™] may relieve holding pressure to protect your boats transom
- Never leave your boat unattended while your Power-Pole is providing anchorage.

MAINTENANCE AND STORAGE:

- CAUTION—Hydraulic lines always have pressure, disconnecting the lines will cause sudden high pressure leakage and Power-Pole™ failure which may cause bodily harm.
- Check all hydraulic lines at frequent intervals for proper tightness to be sure there are no leaks.
- Make sure all power connections are secure and free of corrosion
- Check all nuts, bolts, and screws at frequent intervals for proper tightness to be sure Power-Pole™ is in safe working condition.
- Check all hydraulic lines at frequent intervals for possible chaffing or damage from kinking or abrasion.
- Keep the hydraulic reservoir filled within the indicator marks at all times
- Thoroughly rinse and lubricate all moving parts after each use.

Tools and Materials Needed

- 1. 7/16", 1/2" & 9/16" Wrench
- 2. 7/16", 1/2" & 9/16" Socket and Ratchet
- 3. Electric Drill
- 4. Four Foot Straight Edge
- 5. Marine Grade Sealant
- 6. Tape Measure
- 7. Wire Cutters
- 8. Razor Tube Cutter
- 9. Small Funnel
- 10. Wire Crimpers
- 11. 5/16" & 5/32" Drill Bits
- 12. 1 Quart Automatic Transmission Fluid
- 13. #1 & #2 Phillips Head Screw Drivers
- 14. Jig Saw or Rotary Saw

Hardware Included

- a. Qty(4) 5/16 x 3.5" all-thread transom mount bolts
- b. Qty(1) 5/16 x 3.5" cylinder ram bolt
- c. Qty(2) cylinder ram spacers
- d. Qty(2) thru hull bushings
- e. Qty(1) Cylinder end cap bushing
- f. Qty(3) marine wire ties
- g. Qty(4) 5/16 fender washers
- h. Qty(4) 5/16 lock nuts
- i. Qty(4) neo-bond washers
- j. Qty(2) cylinder ram bolt washers
- k. Qty(2) Brown cylinder ram bolt bushings
- l. Qty(1) 5/16 low profile locknut
- m. Pole-Protector valve





DIAGRAM #	Description	Part Number
1	Type 25 thread cutting screw	VP1154
2	Solenoid valve	VP1135-R (Red) VP1135-G (Green)
3	Pole Protector Connector	VP1955
4	1/8" NPT to 1/4" tube connector (To cylinder base)	VP1146
5	1/8" NPT to 1/4" tube connector (To cylinder end)	VP1146
6	Fill indicator	
7	Wire Harness (22')	WH1000
8	Quick-disconnect plug	VP1143
9	Filler Stack and Plug	H1180
10	Motor Strap	VP1142
11	Mounting bracket for HPU	H1179
12	Lexan Cover	VP1138

Parts Included



Fig (2)

DIAGRAM #	Description	Part Number
13	Top Arm (Inside)	PP1015
14	12" Hydraulic Cylinder	HL12CDA
15	1/4" Hole, (Marks bottom of Arm)	
16	Stern Bracket	PP1017
17	Serial Number keeper plate	PP1018
18	1/4" Hole, (Marks bottom of Arm)	
19	5/16 Hole for Hydraulic Mount	
20	Bottom Arm (Outside)	PP1016
21	5/8" Everflex™ spike	PP1019
22	Spike Bushing	PP1020
23	Top Knuckle	PP1021

Mechanical Schematic HPU# JLDL12DA



Fig (3)

Section 1 Choosing the Location

****IMPORTANT**** Carefully consider and physically check <u>all 5</u> steps in section one <u>before</u> mounting the stern bracket.



1) "Left or Right" side of the boat?

Right-handed caster should put the *Power-Pole*[™] on the right side and lefthanders should be on the left side. This is especially important when fly-fishing. The boat will pivot in the wind to the proper angle for easy downwind casts without the back-cast being over the center of the boat.









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2) Vertical Positioning—no trim tabs

Use a straight edge on the bottom plane of the boat directly below and centered from the Stern Bracket. Mount the *Power-Pole*[™] so that the Bottom Arm mounting point of the stern bracket is 4" above the straight edge.

3) Trim Tab Clearance

If your boat has trim tabs it is very important to check their clearance requirements before mounting the bracket. For example, when the bracket is mounted at the suggested 4" above the bottom plane of the boat it will have about 11.5" of clearance for trim tabs. If your Trim Tabs are 12" and you are mounting the bracket over them, then you must mount it at least 5" above the boat's bottom plane rather than the suggested 4". Standard 9" Trim Tabs do not interfere with the *Power-Pole*[™].



Fig (7)

Section 2-Mounting The Stern Bracket

4) Obstructions

Look inside the boat along the transom to make sure that the bolts will not have any obstructions.

5) Motor Clearance

Turn the motor all the way in the direction of the *Power-Pole*TM then lower to make sure the motor does not interfere. Spin the propeller to make sure it has clearance also. Allow a minimum of 3" between the motor and the Power-Pole at all times in any position. See fig (7)

Hardware list for this step

- A Qty(4) 5/16 x 3.5 all-thread bolts
- B Qty(4) 5/16 Neo-bond rubber backed washers
- C Qty(4) 5/16 fender washers
- D Qty(4) 5/16 locknuts



Once a location has been chosen, mark all four holes. Before drilling any holes double check the inside to be sure that the bolts are not going to interfere with anything and that you have plenty of room to tighten the nut on the other side.

Once all four holes are marked and drilled, fasten the Stern Bracket using the listed hardware. The rubber backed washers are to protect the powder coated surface of the stern bracket. Use a marine quality sealant on and around the bolt and holes then tighten

adequately, **DO NOT OVER TIGHTEN.**

Section 3-Hydraulic Power Unit (HPU)

Install the (HPU) In a convenient location and in a dry environment. **Important**: The HPU must be mounted in a dry enough location to avoid submersion and drenching. Allow space above the HPU so that it may be slid into its mounting bracket (about 3"). Layout upper holes on HPU mounting bracket 4-5/8" apart and start #10 x 1" screws using 5/32" pilot holes. Then drill 5/32" pilot holes for lower screws and mount bracket. Slide HPU into bracket.

Section 4-Installing the Lines and Cylinder

Unpack the hydraulic cylinder from the box with the two 90° nickel plated push-fit hydraulic line connectors pre-installed.



Insert the 1/2" long bushing into the 5/16 hole in the RED end cap (*found in the Power-Pole*[™] hardware bag). Install on the same side as the hydraulic fittings. See fig (9b)

Partially remove the $1/4" \times 3 1/2"$ bolt on the top of the stern bracket and install the cylinder. The hydraulic fittings should be on the same side of the *Power-Pole*TM as the serial# plate.

Attach the hydraulic lines to the push-fit connectors by simply pushing the line into the fitting. "no tools required". Route the top line down the cylinder and secure with the enclosed marine wire straps. Route the bottom line directly down and thru the serial# plate. Continue to route each line behind the Serial plate and into the boat. See fig (9a) The lines can either go

through or over the transom whichever you prefer. Two through hull sleeves are included to make a clean transom penetration.

Cover the ends of the tubing with tape during the installation to prevent any debris from getting in the lines and contaminating the oil. The slightest piece for dirt could cause severe problems.

***Note: With the Power-Pole[™] in the full up position pull any slack from inside the u-channel, this will prevent the hydraulic lines from jamming when lowing the Power-Pole[™].

****IMPORTANT**** Once the lines are routed behind the serial# plate and connected to the push fit connectors move the cylinder through the entire range of motion to make sure the lines are not going to kink, chafe or otherwise be damaged during normal use.

Install the Pole-Protector valve as indicated in *fig. (10)* then route the lines from the *Power-Pole*[™] to the HPU through the most convenient and direct way. Attach with clips and hose benders wherever necessary. COVER THE ENDS OF THE TUBING TO PRE-VENT CONTAMINATION FROM ENTERING THE SYSTEM WHILE ROUTING THE LINES THROUGH THE BOAT.

Make sure the line that has the Pole-Protector in it is attached to the base side of the hydraulic cylinder. *See fig (10)*



Section 5-Choose Location for Switch

The control switch should be mounted where it is easily accessible from anywhere on the boat. Remember the switch requires a +12v DC supply with a minimum of 12 AWG wire. If the switch is mounted in the bow of the boat you should use 10 AWG wire. Multiple switches can also be installed.

Section 6- Mounting Switch

Mark the cutout area and allow room for the faceplate screws. Check to make sure you are not going to interfere with anything on the other side. Use a jig saw to cut out the marked area then screw in place.

Section 7-Connect Wires

*****IMPORTANT***** The +12v source should be directly from the battery with a minimum size of 12 AWG wire. If an inadequate wire is used the *Power-Pole*[™] may not function properly.



Remove this cutout from your manual and tape to your console at the desired switch location. Using a fiberglass cutting blade cut the solid line. Try to remove all the line without going outside the dashed line.



Section 9-Prime Pump

After all lines are completely installed, remove the plug from filler stack located at the front left corner of the reservoir. Fill reservoir to "Full Line" using any type automatic transmission fluid (ATF).

Using the control, cycle the cylinder from all the way out to all the way in several times to clear all the air from the system. No bleeding is necessary. To prevent the cylinder from scaring the inside of the u-channel, wrap the end of the ram with a soft cloth during this step.

Section 10-Final Assembly

1) Using the 5/16 x 3.5" bolt attach the cylinder ram to the Uchannel as shown.

Hardware list for this step

- A. Qty (1) 5/16 x 18 x 3.5 bolt
- B. Qty (2) 5/16 thin wall washer
- C. Qty (2) 5/16 brown bushing
- D. Qty (1) 5/16 low-profile lock nut
- E. Qty (1) small ram spacer
- F. Qty (1) large ram spacer



NOTE The large spacer goes on the same side of the ram as the hydraulic fittings to offset the cylinder enough so that the lines do not interfere with the u-channel.

IMPORTANT!!

REGISTER YOUR *POWER-POLETM Shallow Water Anchor*

This warranty registration card must be completed and mailed to JL Marine Systems, Inc. to validate your warranty.

CUSTOMER INFORMATION

Pu	rchaser's Name		Age			
Pur	rchaser's Address					
Cit	yS	tate _	Zip			
Boat type			Length			
E-r	nail					
POWER-POLE TM INFORMATION						
Date of Purchase: Month Day Year						
Serial No(Found			l on Stern Bracket)			
Pla	ace of purchase					
сι	USTOMER SATISFACTION					
Wł	nere did you hear about <i>Power-Pole</i> ™?	Wh	at type of fishing do you prefer?			
0	Television (show)	0	Redfish, Snook and Trout			
0	Word of Mouth	0	Bone Fish			
0	Internet	0	Tarpon			
0	Advertisement (type)	0	Bass			
0	Other	0	Other			
Wł	nat is your favorite feature?	Wh	at is your favorite bait?			
0	Quiet	0	Live Bait			
0	Convenience	0	Cut Bail			
0	Boat Control	0	Artificial			
0	Holding Power	0	Fly			
0	Other					

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