

Owner's Manual & Safety Instructions

Save This Manual Keep this manual for the safety warnings and precautions, assembly, operating, inspection, maintenance and cleaning procedures. Write the product's serial number in the back of the manual near the assembly diagram (or month and year of purchase if product has no number). Keep this manual and the receipt in a safe and dry place for future reference.

ITEM 68422

PACIFICHYDROSTAR®

1/6 HORSEPOWER SUBMERSIBLE UTILITY PUMP



Visit our website at: <http://www.harborfreight.com>
Email our technical support at: productsupport@harborfreight.com

REV 14c

When unpacking, make sure that the product is intact and undamaged. If any parts are missing or broken, please call 1-888-866-5797 as soon as possible.

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⚠ WARNING

**Read this material before using this product.
Failure to do so can result in serious injury.
SAVE THIS MANUAL.**

Before start-up, note the following:

The pump can be connected to any shock-proof plug which has been installed according to regulations. The plug must have a supply voltage of 120 VAC at 60 Hz.

CAUTION

This pump has been evaluated for use with water only.

⚠ WARNING

IMPORTANT! For your own safety – before starting to run the pump, please have the following items checked by an expert:

1. Risk of electric shock – This pump is supplied with a grounding conductor and grounding-type attachment plug. To reduce the risk of electric shock, be certain that it is connected only to a properly grounded, grounding-type receptacle.
2. Risk of electric shock – This pump has not been investigated for use in swimming pool areas.
3. The electrical connections must be protected from moisture. **Do not submerge power cord connection.**
4. If there is danger of flooding, the electrical connections must be taken to higher ground.
5. Circulation of caustic fluids, as well as the circulation of abrasive materials, must be avoided at all costs.
6. The pump must be protected from frost.
7. The pump must be protected from running dry.
8. Access by children should also be prevented with appropriate measures.
9. **WARNING:** Handling the Power Cord on this product will expose you to lead, a chemical known to the State of California to cause cancer, and birth defects or other reproductive harm. Wash hands after handling. (California Health & Safety Code § 25249.5, *et seq.*)
10. People with pacemakers should consult their physician(s) before use. Electromagnetic fields in close proximity to heart pacemaker could cause pacemaker interference or pacemaker failure.
11. The warnings, precautions, and instructions discussed in this instruction manual cannot cover all possible conditions and situations that may occur. It must be understood by the operator that common sense and caution are factors which cannot be built into this product, but must be supplied by the operator.

Fluid Type

The Pump is designed for use with water with a maximum temperature of 77° F (25°C). Do not use the pump for other fluids, especially not fuels, cleaning fluids, or other chemical products.

Specifications

Electrical Requirements	120VAC / 60Hz / 2.2 A
Motor	1/6 Horsepower Electric
Power Cord Length	10 ft. (Do not submerge beyond power cord length. Do not submerge power cord connection.)
Maximum Flow Rate	1350 GPH
Maximum Head Lift	23 ft.
Discharge Size	1" NPT
Drains To 1/2" of surface	



Installation

The submersible pump must be installed with either:

- a. A fixed pipeline or
- b. A flexible hose pipe.

Please note!

1. Do not install the pump by suspending it unsupported from its delivery pipe or power cord. The pump must be suspended from the handle or be placed on the bottom of the area.
2. Make sure the Pump rests on flat, level and solid foundation. Do not operate it on earth, clay, sand or gravel surfaces.
3. Make sure the Pump's inlet openings near the suction base are free of debris.
4. Avoid installing Pump in areas of extreme heat or cold.

Power Supply

1. The pump is equipped with a shock-proof plug according to regulations. The pump is designed to be connected to 120 VAC, 60 Hz safety socket.
2. Make sure that the socket is sufficiently secured and is in excellent condition.
3. When the plug is inserted into the socket the pump will start operating.

WARNING! If the power cord or plug is damaged, do not use the pump. The power cord or plug may only be repaired by a certified electrician.

Hose Connections

1. Use the included adaptor to connect a 5/8" or larger hose to the pump outlet using a step nipple and hose clamps (not included).
2. Route the hose to the desired discharge area. The hose should be kept as short as possible with a minimum number of turns. For best performance, the max. recommended hose length is 50 ft.
3. To reduce vibration and noise, a short section of rubber hose maybe be attached to the end of the discharge line with clamps.

Areas of use

1. This pump can be used to transfer water (e.g. household, farming, plumbing).

Operation

After reading these instructions, consider the following points before starting the pump:

1. Verify that the pump rests on the floor of the shaft, if it is not suspended by the handle.
2. Verify that the delivery pipe is properly connected.
3. Verify that the electrical connection is 120 VAC, 60 Hz.
4. Verify that the electrical socket is in good condition.
5. Verify that water and moisture cannot get near the power supply socket or power cord connection.
6. Verify that the pump is installed so as to prevent running dry. **NOTE:** The Pump will remove water down to 1/2". Unplug the Pump once 1/2" water level is reached.
7. If the pump is not going to be monitored **CONSTANTLY** and disconnected when the water level drops, it must be installed with an automatic float switch (not included) to shut it off before it runs dry. **CAUTION:** Do not run the Pump dry. Doing so will increase wear on the unit and can lead to seal damage.
8. Plug power cord into an outlet protected by a GFCI.



⚠️ WARNING

TO PREVENT SERIOUS INJURY FROM ACCIDENTAL OPERATION:

Unplug the Pump from its electrical outlet before performing any inspection, maintenance, or cleaning procedures.

If the pump is moved during operation, flush it out with clean water after every use.

Quarterly Maintenance

The below maintenance must be performed at least once every 3 months under optimal conditions. For frequent use, or dirty areas, more frequent maintenance is required.

1. Clean sludge and debris from the base of the Pump.
2. Rinse the housing off with clean water.
3. Clean fibers from inside the pump housing with a clean cloth, then store Pump in a dry and clean location away from children.
4. If the pump housing cannot be cleaned from the outside, it must be thoroughly cleaned.
Unplug the power cord before maintenance.
Dismantle the bottom part of the pump as follows:
 - a. Remove Screws (5) and Volute (4).
 - b. Clean the impeller with clean water.
 - c. To prevent damage, do not rest the pump on the impeller or pry against the impeller.
 - d. Reassemble in reverse order.



Troubleshooting

Problem	Possible Causes	Possible Solutions
Pump runs, but will not deliver any water.	<ol style="list-style-type: none"> 1. Filter clogged. 2. Impeller clogged. 3. When starting, the water height falls below the minimum water level (1/2"). 4. Low line voltage. 5. Optional check valve stuck or installed backwards. 	<ol style="list-style-type: none"> 1. Clean out dirt and debris from filter. 2. Remove Volute. Clean out dirt and debris from Impeller. Replace Volute. 3. There must be at least 1/2" deep water for the Pump to operate properly. 4. Consult with an electrician. 5. Remove and examine check valve.
Pump won't start or run.	<ol style="list-style-type: none"> 1. Filter clogged. 2. Impeller clogged. 3. Defective motor. 	<ol style="list-style-type: none"> 1. Clean out dirt and debris from filter. 2. Remove Volute. Clean out dirt and debris from Impeller. Replace Volute. 3. Replace with new pump.
Excessive noise or vibration.	<ol style="list-style-type: none"> 1. Worn bearings. 2. Debris in impeller. 3. Discharge hose restricted. 	<ol style="list-style-type: none"> 1. Replace with new pump. 2. Remove filter. Clean impeller. Then replace filter. 3. Clean Pump and discharge hose.
Pump starts and stops too frequently.	<ol style="list-style-type: none"> 1. Water temperature too high. 2. Back flow of water from discharge hose. 	<ol style="list-style-type: none"> 1. Do not exceed 77° Fahrenheit water temperature. 2. Install or inspect optional check valve.



**Follow all safety precautions whenever diagnosing or servicing the tool.
Disconnect power supply before service.**

SAFETY

SETUP

OPERATION

MAINTENANCE



PLEASE READ THE FOLLOWING CAREFULLY

SAFETY

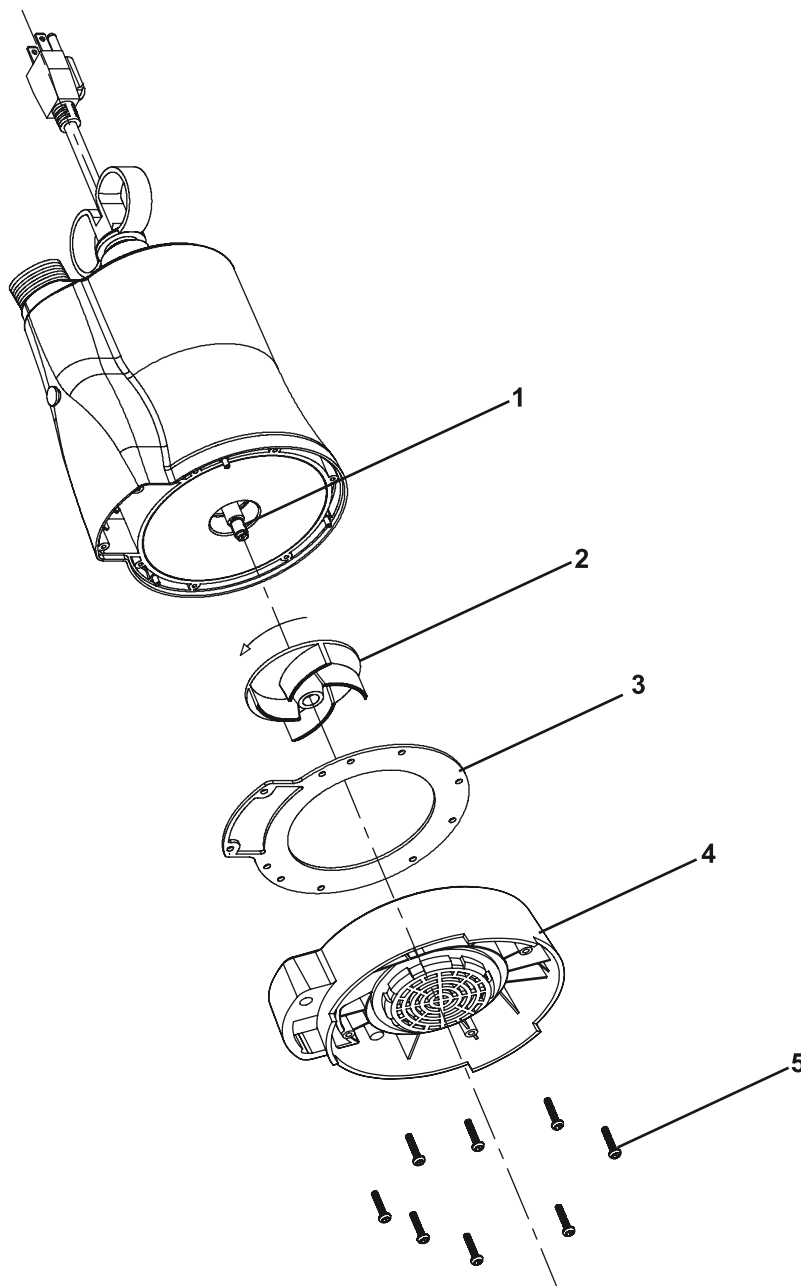
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PARTS LIST AND ASSEMBLY DIAGRAM

SETUP

Part	Description	Qty.
1	Shaft	1
2	Impeller	1
3	Seal Gasket	1
4	Volute	1
5	Screw	8

OPERATION



MAINTENANCE

Record Product's Serial Number Here: _____

Note: If product has no serial number, record month and year of purchase instead.

Note: Some parts are listed and shown for illustration purposes only, and are not available individually as replacement parts.

Limited 90 Day Warranty

Harbor Freight Tools Co. makes every effort to assure that its products meet high quality and durability standards, and warrants to the original purchaser that this product is free from defects in materials and workmanship for the period of 90 days from the date of purchase. This warranty does not apply to damage due directly or indirectly, to misuse, abuse, negligence or accidents, repairs or alterations outside our facilities, criminal activity, improper installation, normal wear and tear, or to lack of maintenance. We shall in no event be liable for death, injuries to persons or property, or for incidental, contingent, special or consequential damages arising from the use of our product. Some states do not allow the exclusion or limitation of incidental or consequential damages, so the above limitation of exclusion may not apply to you. **THIS WARRANTY IS EXPRESSLY IN LIEU OF ALL OTHER WARRANTIES, EXPRESS OR IMPLIED, INCLUDING THE WARRANTIES OF MERCHANTABILITY AND FITNESS.**

To take advantage of this warranty, the product or part must be returned to us with transportation charges prepaid. Proof of purchase date and an explanation of the complaint must accompany the merchandise. If our inspection verifies the defect, we will either repair or replace the product at our election or we may elect to refund the purchase price if we cannot readily and quickly provide you with a replacement. We will return repaired products at our expense, but if we determine there is no defect, or that the defect resulted from causes not within the scope of our warranty, then you must bear the cost of returning the product.

This warranty gives you specific legal rights and you may also have other rights which vary from state to state.





3491 Mission Oaks Blvd. • PO Box 6009 Camarillo, CA 93011 • 1-888-866-5797