

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.

19b



1/2 HP NON-SUBMERSIBLE TRANSFER PUMP



**Do not return
pump to the store.
Call 1-844-416-9141**

63316

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

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.

⚠ WARNING

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

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Before start-up, note the following:

The pump must be connected to a GFCI protected 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.
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.  **To prevent death from electric shock, pump must be connected only to a GFCI protected outlet.**
10.  **Do not pump flammable materials. Motor brushes may spark and cause explosions.**
11. Do not use an extension cord with this item.
12. 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.
13. 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

Horsepower	1/2 HP
Electrical Rating	120VAC / 60Hz / 10A
Power Cord Length	8'
Maximum Flow @ 0'	1525 GPH
Maximum Head lift @ 0' Flow	56 PSIG
Discharge Port	3/4" Garden Hose Thread

Installation

The pump must be installed in a stationary position 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 basin. To ensure that the pump works properly, keep the bottom free from sludge and dirt of all kinds.
2. If the water level sinks too low, any sludge in the basin will dry out and stop the pump from starting. To help ensure the pump will start as required, check the pump regularly with start-up tests.

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 GFCI protected socket.
2. Make sure that the socket is sufficiently secured and is in excellent condition.
3. Depending on application, a separate flow switch (not included) may be needed between the plug and the outlet.
4. When the plug is inserted directly into the socket, the pump will turn on.
5.  **WARNING: To prevent death from electric shock, pump must be connected only to a GFCI protected outlet.**

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.

Areas of use

1. This pump is designed to pump water only.
2. This pump is designed to be used for:
General purpose removal or transfer of clear water.
3. This pump should NOT be used for:
Continuous run, fountain/pond water features. Removing water from swimming pools or spas. Septic or sewage systems.
4. This pump can also be used to transfer water (e.g. household, farming, plumbing).

Installation Instructions

1. Attach hose to Pump intake port. Attach second hose to Pump discharge port.
2. Position Pump on solid surface so that both hoses are free from kinks. Plug Power Cord into GFCI protected outlet.

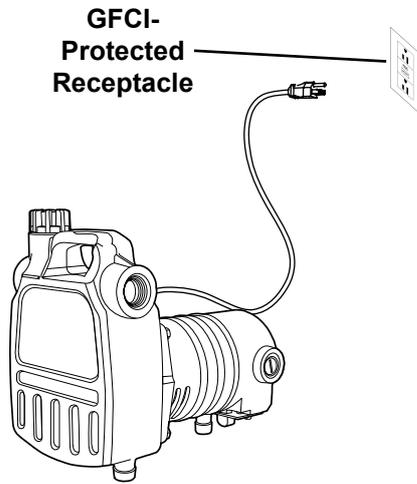


Figure A: GFCI Plug

3. Place unused end of intake hose in water to be transferred. Place unused end of discharge hose as needed to direct the water discharge at least 3 feet away from the source.

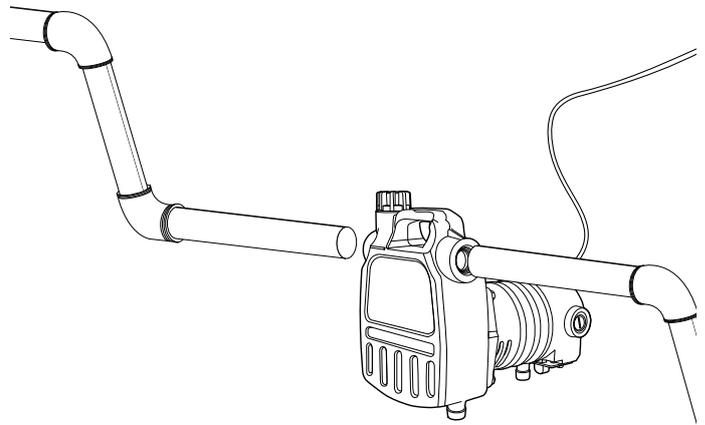


Figure B: Pump Position

Operation

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

1. Verify that the discharge pipe is properly connected.
2. Verify that the electrical connection is 120 VAC, 60 Hz.
3. Verify that the electrical socket is GFCI protected and in good condition. Test GFCI protected outlet before use.
4. Verify that water and moisture cannot get near the power supply socket.
5. Verify that the pump is installed so as to prevent running dry.

Maintenance

⚠ 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 bottom of the basin.
2. Clean sludge/debris from inlet screen.
3. Make sure discharge pipe is free from leaks.
4. Make sure check valve is functioning properly.
5. Manually operate any separate flow switch (not included) to determine that pump turns on/off as intended.

Carbon Brush Maintenance

The carbon brushes may require maintenance when the motor performance of the pump decreases or stops working completely. To maintain the brushes:

1. Remove the carbon brushes from the housing. **Keep track of which orientation the old carbon brushes were in to prevent needless wear if they will be reinstalled.**
2. If either carbon brush is worn down by more than 1/2, replace **both** carbon brushes.
3. To clean old carbon brushes before reusing them, rub the contact areas with a pencil eraser.
4. Reinsert the old carbon brushes in the same orientation to reduce wear.
5. When installing the carbon brushes, make sure the carbon portions of the carbon brushes contact the motor armature, and that the springs face away from the motor. Also, make sure the springs operate freely.

Note: New carbon brushes tend to spark when first used until they wear and conform to the motor's armature.

Troubleshooting

Problem	Possible Causes	Possible Solutions
Pump runs, but will not deliver any water.	<ol style="list-style-type: none"> 1. Inlet Screen and/or impeller clogged. 2. Low line voltage. 3. Check valve (sold separately) stuck or installed backwards. 	<ol style="list-style-type: none"> 1. Remove Inlet Screen. Clean out dirt and debris from Inlet Screen and impeller. Then replace Inlet Screen. 2. Consult an electrician. 3. Remove and examine check valve.
Pump won't start or run.	<ol style="list-style-type: none"> 1. Check power connections and circuits/fuses. 2. Inlet Screen and/or impeller clogged. 3. Defective motor. 	<ol style="list-style-type: none"> 1. Consult an electrician. 2. Remove Inlet Screen. Clean out Inlet Screen and impeller. Reinstall Inlet Screen. 3. Have a qualified service technician repair or replace.
Excessive noise or vibration.	<ol style="list-style-type: none"> 1. Debris in impeller. 2. Discharge hose restricted. 	<ol style="list-style-type: none"> 1. Remove Inlet Screen. Clean impeller. Reinstall Inlet Screen. 2. Clean Pump and discharge hose.
Pump starts and stops too frequently.	<ol style="list-style-type: none"> 1. Water temperature too high. 2. Check valve (sold separately) stuck or installed backwards. 3. Back flow of water from discharge hose. 	<ol style="list-style-type: none"> 1. Do not exceed 77° F (25°C) water temperature. 2. Remove and examine check valve. 3. Install or inspect check valve (sold separately).



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

PLEASE READ THE FOLLOWING CAREFULLY

THE MANUFACTURER AND/OR DISTRIBUTOR HAS PROVIDED THE PARTS LIST AND ASSEMBLY DIAGRAM IN THIS MANUAL AS A REFERENCE TOOL ONLY. NEITHER THE MANUFACTURER OR DISTRIBUTOR MAKES ANY REPRESENTATION OR WARRANTY OF ANY KIND TO THE BUYER THAT HE OR SHE IS QUALIFIED TO MAKE ANY REPAIRS TO THE PRODUCT, OR THAT HE OR SHE IS QUALIFIED TO REPLACE ANY PARTS OF THE PRODUCT. IN FACT, THE MANUFACTURER AND/OR DISTRIBUTOR EXPRESSLY STATES THAT ALL REPAIRS AND PARTS REPLACEMENTS SHOULD BE UNDERTAKEN BY CERTIFIED AND LICENSED TECHNICIANS, AND NOT BY THE BUYER. THE BUYER ASSUMES ALL RISK AND LIABILITY ARISING OUT OF HIS OR HER REPAIRS TO THE ORIGINAL PRODUCT OR REPLACEMENT PARTS THERETO, OR ARISING OUT OF HIS OR HER INSTALLATION OF REPLACEMENT PARTS THERETO.

Parts List

Part	Description	Qty.
1	Rubber Foot	3
2	Pump Facing	1
3	Hose Fitting	2
4	Priming Plug	1
5	Pump Gasket	1
6	Impeller	1
7	Spring Washer	4
8	Mechanical Seal	1
9	Hex Head Screw	4
10	Water Retaining Washer	1
11	Guide Plate	1
12	Grooved Pan Head Screw	2
13	Spring Washer	5
14	Flat Washer	2
15	Wind Deflector	1
16	Ball Bearing	1

Part	Description	Qty.
17	Carbon Brush Combination	2
18	Armature	1
19	Ball Bearing	1
20	Stator	1
21	Pump Housing	1
22	Cable Box	1
23	Allen Flat End Set Screw	2
24	Copper Terminals	2
25	Wiring Cap	2
26	Grooved Pan Head Screw	2
27	Power Cord Clamp	1
28	Cable Clip	1
29	Power Cord	1
30	Grounding Screw	1
31	Earthing Terminal	1
32	External Serrated Lock Washer	1

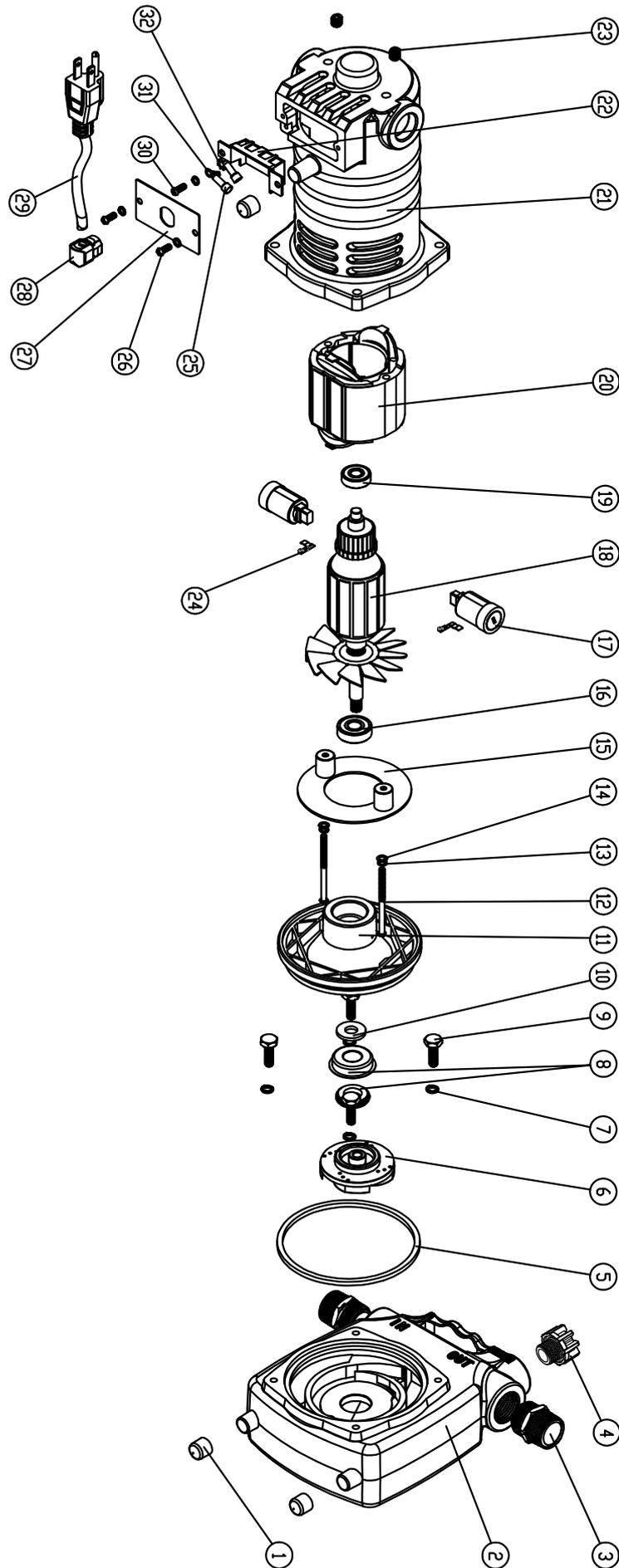
Record Product's Serial Number Here: _____

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.



Assembly Diagram



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.

