

BPLA UTILITY PUMP (12-VOLT DC)

OPERATION



CAUTION: This pump is designed for intermittent use only (15 minutes on – 45 minutes off) with liquid no hotter than 160°F.

CAUTION: The pump is cooled by pumping fluid. Do not let the pump operate dry; this can damage the seal and cause motor failure.

NOTE: This pump is designed to operate submerged or in-line. It can be placed in any position below the water level when primed.

1. For proper operation, connect the pump to a steady 12-volt DC power source or a 12-volt battery in good condition. A low-voltage power source may cause critical overheating and premature failures. To avoid this, maintain proper voltage and use recommended wire size during installation (Table 1).
2. Use the hooded inlet plate for submersible operation. For in-line operation, remove the inlet plate mounting screws and replace the hooded inlet plate with the threaded inlet plate. Make certain that the inlet O-ring seal is installed in the groove on the inlet plate before reassembly. Carefully reinsert the mounting screws, taking care not to cut new threads or strip the screw holes.
3. When connected in-line, slope the hose or pipe connection upward from the pump inlet to the water supply. A flooded suction is necessary for pump to operate.
4. If the surface is dirt or sand, place the pump on a flat object (such as a piece of wood or metal) to prevent it from being clogged.
5. Support the weight of the pump adequately. DO NOT support the pump by the intake or discharge connections alone.
6. Do not restrict the intake side of the pump. This can damage the seal and starve the pump. To reduce the flow, place a valve on the discharge side of the pump or, if flexible vinyl tubing is used, a clamp on the tubing.
7. If the pump will be idle for an extended period, clean it according to the MAINTENANCE section. Do not let the pump freeze in the wintertime. This can cause cracking or distortion that will damage the pump.

INTRODUCTION

This instruction sheet provides you with the information required to safely own and operate your product. Retain these instructions for future reference.

The product you have purchased is of the highest quality workmanship and material, and has been engineered to give you long and reliable service. These products are carefully tested, inspected, and packaged to ensure safe delivery and operation. Please examine your item(s) carefully to ensure that no damage occurred during shipment. If damage has occurred, please contact the place of purchase. They will assist you in replacement or repair, if required.

READ THESE INSTRUCTIONS CAREFULLY BEFORE ATTEMPTING TO INSTALL, OPERATE, OR SERVICE YOUR PRODUCT. KNOW THE PRODUCT'S APPLICATION, LIMITATIONS, AND POTENTIAL HAZARDS. PROTECT YOURSELF AND OTHERS BY OBSERVING ALL SAFETY INFORMATION. FAILURE TO COMPLY WITH THESE INSTRUCTIONS COULD RESULT IN PERSONAL INJURY AND/OR PROPERTY DAMAGE!

SAFETY GUIDELINES



WARNING: When attaching pump leads to battery terminals, be sure that the area is adequately ventilated to prevent an explosion or fire from explosive or flammable vapors that may be present. Consult the battery manufacturer for additional safety information.

Disconnect the pump from the power source before servicing or removing any component.

Do not use to pump flammable or explosive fluids such as gasoline, fuel oil, kerosene, etc. Do not use in explosive atmospheres. Pump should only be used with liquids compatible with pump component materials.

Do not handle pump with wet hands or when standing on a wet or damp surface or in water.

Batteries emit explosive hydrogen gas. Avoid smoking, sparks, or open flame anywhere near the battery.

An explosion from the battery can cause blindness. Shield your eyes when working near the battery.

Batteries contain sulfuric acid. In case of contact with eyes, skin, or clothing, flush immediately with large amounts of water and get medical attention.

Do not add acid or electrolyte to the battery.

Keep out of reach of children.

In any installation where property damage and/or personal injury might result from an inoperative or leaking pump due to power outages, discharge line blockage, or any other reason, use a backup system(s) and/or alarm.

Support the pump and its piping when assembling and when installed. Failure to do so may cause piping to break, pump to fall, motor bearing failures, etc.

ELECTRICAL CONNECTIONS



1. Check the pump label for proper voltage required. Do not connect to voltage other than that shown.
2. For proper motor protection, install a 2.0 amp fuse in the circuit.
3. When using a battery as the power source, attach the red positive (+) lead wire to the positive (+) battery terminal, then attach the black negative (-) lead wire to the ground (-) battery terminal. When disconnecting the pump, first disconnect the black negative (-) lead wire from the ground (-) battery terminal, then disconnect the red positive (+) lead wire from the positive (+) battery terminal.
4. Refer to Table 1 for recommended minimum lead wire sizes.

DISTANCE FROM POWER SOURCE TO PUMP	RECOMMENDED MINIMUM WIRE SIZE
1 – 15 feet	18 AWG
15 – 50 feet	16 AWG

Table 1

MAINTENANCE



WARNING: DISCONNECT THE PUMP FROM THE POWER SOURCE BEFORE SERVICING OR REMOVING ANY COMPONENT.

CAUTION: The pump is permanently lubricated. Oiling is not required. DO NOT open the sealed portion of the pump or remove the housing screws.

NOTE: The power leads on this pump cannot be replaced; if they become damaged the entire pump must be replaced.

Clean the pump periodically to prolong its life and efficiency:

1. Disconnect the black negative (-) lead wire, then disconnect the red positive (+) lead wire.
2. Check the lead wires to ensure that they are in good condition with no nicks or cuts.
3. Remove the volute mounting screws, then remove the volute from the pump. DO NOT remove any other screws.
4. Lightly clean any corrosion or debris that may clog the impeller. Use a brush and penetrating oil and lightly scrape to remove encrusted material.
5. Turn the impeller by hand to make sure it turns freely.
6. Place the pump on a solid surface, ensuring that the pump and impeller are not touching anything. Connect the pump to 12VDC power source for 10 seconds. If the impeller rotates, disconnect the pump from the power source and install the parts in reverse order. If the impeller does not rotate or the pump does not operate properly, return the pump to Franklin Electric or an authorized service center. DO NOT attempt repairs yourself.

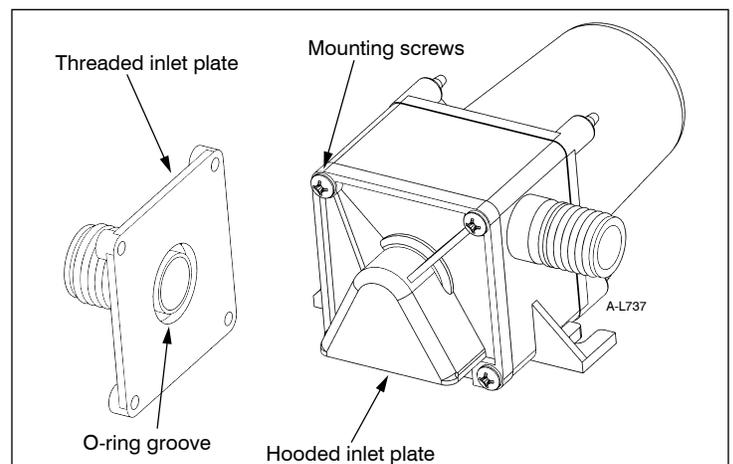


Figure 1

TROUBLESHOOTING		
PROBLEM	PROBABLE CAUSES	CORRECTIVE ACTION
Pump fails to run.	<ol style="list-style-type: none"> 1. No electricity or low voltage. 2. Impeller clogged. 3. Motor has open circuit. 	<ol style="list-style-type: none"> 1. Be sure correct voltage is available. 2. Clean impeller. 3. Replace pump.
Pump runs but no fluid flows.	<ol style="list-style-type: none"> 1. Discharge height too great. 2. Inlet screen clogged. 3. Discharge valve closed. 4. Air trapped in pump. 5. No water in reservoir. 6. Pump inlet located above liquid level. 	<ol style="list-style-type: none"> 1. Lower the height. 2. Clean screen. 3. Open the valve. 4. Purge to eliminate air. 5. Refill. 6. Pump inlet must be below liquid level (flooded).
Flow rate is low.	<ol style="list-style-type: none"> 1. Low voltage. 2. Impeller clogged. 3. Inlet or discharge plumbing restricted. 4. Discharge plumbing undersized. 5. Discharge height too great. 6. Polarity is reversed. 	<ol style="list-style-type: none"> 1. Be sure correct voltage is available. 2. Clean impeller. 3. Clean plumbing. 4. Replace with larger plumbing. 5. Lower the height. 6. Reverse polarity.
Pump starts and stops pumping.	<ol style="list-style-type: none"> 1. Impeller or inlet screen clogged. 2. Defect in motor. 3. Incorrect voltage or frequency. 	<ol style="list-style-type: none"> 1. Clean impeller and screen. 2. Replace pump. 3. Be sure correct voltage and frequency is supplied to pump.

LIMITED WARRANTY

Your product is guaranteed to be in perfect condition when it leaves our factory. It is warranted against defective materials and workmanship for a period of 90 days from date of purchase by the user. No warranty on brush wear, impeller or cam.

Any product that should fail for either of the above two reasons and is still within the warranty period will be repaired or replaced at the option of Little Giant Pump Company, Inc. dba Franklin Electric Water Transfer Systems (hereafter "the manufacturer") as the sole remedy of buyer. For our customers in the CONTINENTAL UNITED STATES: Please return the defective unit, postage paid, to the factory at 301 North MacArthur Blvd., Oklahoma City, OK 73127-6616. All defective product returned under warranty will be fully inspected to determine the cause of failure before warranty is approved.

For our customers located elsewhere; it is not economical, due to duties and freight, to return the pump to the factory for inspection. Please return the defective unit to any authorized distributor or dealer with a brief written explanation of the problem. If there are no apparent signs of customer abuse, unit will be repaired or replaced. If dispute arises over replacement of the pump, the distributor or dealer is to segregate such items and hold for inspection by a representative of Little Giant or notify factory with details of the problem for factory disposition and settlement of warranty claim.

DISCLAIMER: THE FOREGOING WARRANTY IS AN EXCLUSIVE WARRANTY IN LIEU OF ANY OTHER EXPRESS WARRANTIES. ANY IMPLIED WARRANTIES (INCLUDING, BUT NOT LIMITED TO ANY IMPLIED WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE) TO THE EXTENT EITHER APPLIES TO A PUMP SHALL BE LIMITED IN DURATION TO THE PERIODS OF THE EXPRESS WARRANTIES GIVEN ABOVE.

Warranty will be **VOID** if any of the following conditions are found:

1. Sealed motor housing opened.
2. Product connected to voltage other than indicated on nameplate.
3. Cord cut off to a length less than three feet.
4. Pump allowed to operate dry (fluid supply cut off).
5. Pump used to circulate anything other than fresh water, light oils, or other mild liquids at approximately room temperature.
6. Product abuse by customer.

Any oral statements about the product made by the seller, the manufacturer, the representatives or any other parties, do not constitute warranties, shall not be relied upon by the user and are not part of the contract for sale. Seller's and manufacturer's only obligation, and buyer's only remedy, shall be the replacement and/or repair by the manufacturer of the product as described above. NEITHER SELLER NOR THE MANUFACTURER SHALL BE LIABLE FOR ANY INJURY, LOSS OR DAMAGE, DIRECT, INCIDENTAL OR CONSEQUENTIAL (INCLUDING, BUT NOT LIMITED TO INCIDENTAL OR CONSEQUENTIAL DAMAGES FOR LOST PROFITS, LOST SALES, INJURY TO PERSON OR PROPERTY, OR ANY OTHER INCIDENTAL OR CONSEQUENTIAL LOSS), ARISING OUT OF THE USE OR THE INABILITY TO USE THE PRODUCT AND THE USER AGREES THAT NO OTHER REMEDY SHALL BE AVAILABLE TO IT. Before using, the user shall determine the suitability of the product for the intended use, and user assumes all risk and liability whatsoever in connection therewith.

Some states and countries do not allow limitations on how long an implied warranty lasts or the exclusion or limitation of incidental or consequential damages, so the above limitations or exclusions may not apply to you. This warranty gives you specific legal rights, and you may also have other rights which vary from state to state and country to country.

For parts or repair, please contact 1.888.572.9933
For technical assistance, please contact..... 1.888.956.0000

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