

SMALL SUBMERSIBLE ENCAPSULATED PUMPS 1-EA SERIES



- INSTALLATION
- OPERATION

- MAINTENANCE
- REPAIR PARTS

INTRODUCTION

This instruction sheet will provide you with information required to safely own and operate the Little Giant encapsulated 1-EA Series pump. The pump you have purchased is a submersible epoxy encapsulated pump (some models are for in-line use) with outer case constructed of durable die cast aluminum and polyester. The inside case is filled with a special heat transfer epoxy.

This instruction sheet covers the standard models of the 1-EA series. Always order replacement parts for the specific Catalog Number of your pump. If the catalog number of your pump is not listed in the replacement parts section, then caution should be exercised when ordering replacement parts.

The Little Giant pumps are carefully inspected, tested and packaged to insure safe operation. When you receive your pump, examine it carefully to determine that there are no broken or damaged parts that may have occurred in shipment. If damage has occurred, make notation and notify the firm from which you purchased the pump. They will assist you in the replacement or repair of the pump.

READ INSTRUCTIONS CAREFULLY BEFORE ATTEMPTING TO INSTALL, OPERATE OR SERVICE THE LITTLE GIANT PUMP. KNOW THE PUMP APPLICATION, LIMITATIONS, AND POTENTIAL HAZARDS. PROTECT YOURSELF AND OTHERS BY OBSERVING ALL SAFETY INFORMATION. FAILURE TO COMPLY WITH INSTRUCTIONS COULD RESULT IN PERSONAL INJURY AND/OR PROPERTY DAMAGE! RETAIN INSTRUCTIONS FOR FUTURE REFERENCE.

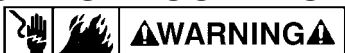
SAFETY GUIDELINES



1. 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.

2. DO NOT HANDLE UNIT WITH WET HANDS OR WHEN STANDING ON A WET OR DAMP SURFACE OR IN WATER.
3. DO NOT PULL THE PUMP OUT OF THE WATER BY THE POWER CORD WHEN THE PUMP IS OPERATING OR CONNECTED TO POWER SOURCE.
4. THIS PUMP IS SUPPLIED WITH A GROUNDING CONDUCTOR AND /OR GROUNDING TYPE ATTACHMENT PLUG. TO REDUCE THE RISK OF ELECTRICAL SHOCK, BE CERTAIN THAT IT IS CONNECTED TO A PROPERLY GROUNDED GROUNDING TYPE RECEPTACLE.
5. THE NATIONAL ELECTRIC CODE REQUIRES A GROUND FAULT CIRCUIT INTERRUPTER (GFCI) BE INSTALLED IN THE BRANCH CIRCUIT SUPPLYING FOUNTAIN EQUIPMENT, POOLS, ETC.
6. IN ANY INSTALLATIONS 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, A BACKUP SYSTEM(S) AND/OR ALARM SHOULD BE USED.
7. SUPPORT PUMP AND PIPING WHEN ASSEMBLING AND WHEN INSTALLED. FAILURE TO DO SO MAY CAUSE PIPING TO BREAK, PUMP TO FAIL, 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. If pump is supplied with a 3-prong electrical plug, the third plug is to ground the pump to prevent possible electrical shock hazard. DO NOT REMOVE the third plug from the cord. If the plug is cut or the cord is shortened, then this action will void the warranty.
3. If the cord is equipped with stripped lead wires, such as on 230v models, be sure that the lead wires are connected to a power source correctly. The green/yellow wire is the ground, the other two are live.

OPERATION

1. The 1-EA style pumps must be run submerged. The pump should be placed with the screen as a base or with cord up. The volute should always be flooded or under water. If the surface is sandy or muddy a separate hard surface such as a brick should be provided under pump to help prevent clogging of the screen.
2. The 1-EA-42 style pumps may be operated submerged or inline. They may be positioned at any attitude, but preferably with the volute located down or to the side.
3. The weight of the pumps must be supported adequately. DO NOT support the pumps by the discharge connection alone. Pumps may be supported by using the two mounting holes in the back of the pump. The holes are designed for #8 self-tapping screws. Hole depth is .37 - DO NOT exceed the hole depth.
4. Do not attempt to restrict the intake side of these pumps. Restricting the intake may cause damage to the seal and may starve the pump. If you require reduced flow rates, then place a valve on the discharge side of the pump or if flexible vinyl tubing is used, a clamp can be used on the tubing to restrict the flow.
5. Do not let the unit operate dry. It is designed to be cooled by pumping fluid. You may damage the seal and the motor may fail if the pump is allowed to run dry.
6. If the unit is going to be idle for a period of time, follow the cleaning instructions outlined in the next section. Do not let the unit freeze in the wintertime. This may cause cracking or distortion that may destroy the unit.

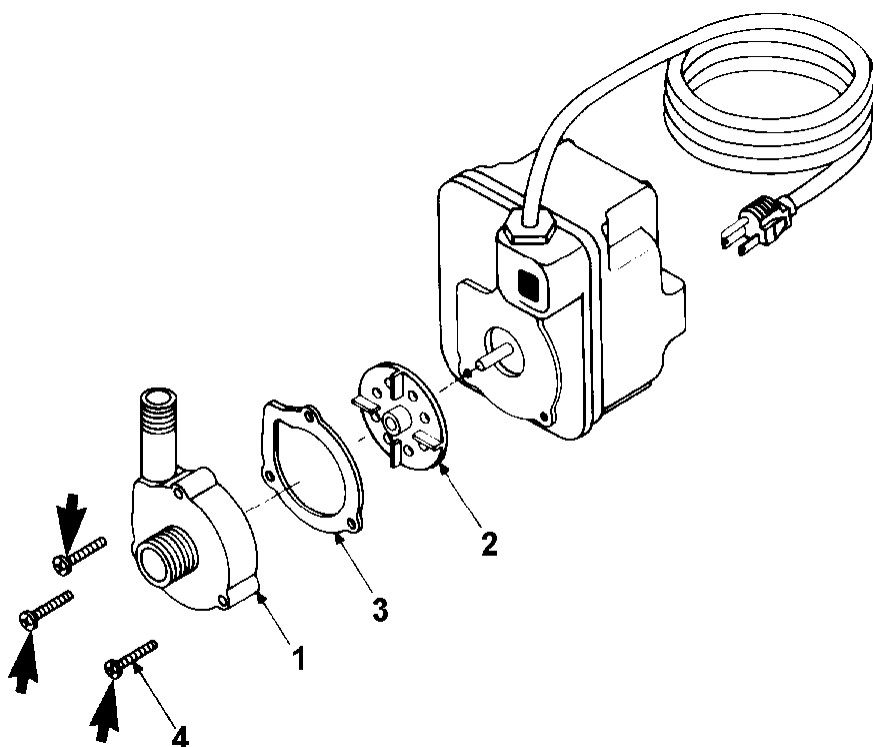
SERVICE INSTRUCTIONS



MAKE CERTAIN THAT THE UNIT IS DISCONNECTED FROM THE POWER SOURCE BEFORE ATTEMPTING TO SERVICE OR REMOVE ANY COMPONENT!

1. This unit is permanently lubricated. Oiling is not required. Do not, in any case, open the sealed portion of the unit or remove housing screws.
2. Periodic cleaning of the pump parts will prolong the LIFE and EFFICIENCY of the pump. Refer to the drawing below for the assembly and disassembly of the pumping head.

3. First remove the screen from the pump. Then remove the 3 screws as indicated by the arrows. (DO NOT remove other screws which may be exposed).
4. Lightly clean any corrosion or debris which 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. Set pump down so the pump and impeller are not touching anything. Plug the unit into GFCI circuit for 10 seconds to see if the impeller turns; a) If it is rotating and GFCI did not trip, unplug unit and install parts in reverse order in which they were removed. b) If it does not rotate, if pump is tripping circuit breakers, or not operating properly after cleaning, return to Little Giant Pump Company or its authorized service center. DO NOT attempt repairs yourself.
6. Be certain power cord is in good condition and contains no nicks or cuts.



				MODEL CAT. NO.
ITEM NO.	PART NO.	DESCRIPTION	QTY.	1-EA-42 518087
1	101377	VOLUTE, NYLON, ¼ X ½ NPT	1	•
2	118442	IMPELLER, NYLON, PRESS-ON	1	•
3	131009	GASKET, NEOPRENE	1	•
4	902411	SCREW, 8-18 X 7/8 STAINLESS STEEL		

LITTLE GIANT WARRANTY STATEMENT

Your Little Giant 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 12 months (90 day warranty on Models: 1-AA-OM, GKPK-SC, PP-1, PPS-1, PP-12, PPS-12 , PP-230 and Cooler King) from date of purchase by the user. No warranty on brush wear in Model 35-OM and impeller or cam in Models PP-1, PP-12, and PP-230. Any product that should fail for either of the above two reasons and is still within the warranty period will be repaired or replaced if returned prepaid to our Factory. All defective product returned under warranty will be fully inspected to determine the "CAUSE OF FAILURE" before warranty is approved. Little Giant will honor the warranty within the warranty time period specified on satisfactory written proof of purchase.

DISCLAIMER: 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. . **The warranty and remedy described in this limited warranty is an EXCLUSIVE warranty and remedy and is IN LIEU OF** any other warranty or remedy, expressed or implied, which other warranties and remedies are hereby expressly **EXCLUDED**, including but not limited to any implied warranty of **MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE**. Some states do not allow the exclusive or limitation of incidental or consequential damages, so the above limitation or exclusion 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.

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 name plate.
3. Cord cut 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.

The National Electric Code requires a Ground Fault Circuit Interrupter (GFCI) be installed in the branch circuit supplying fountain equipment rated above 15 volts. Little Giant Pump Company offers a variety of GFCI's and recommends each pump be used with a GFCI.



LITTLE GIANT PUMP COMPANY
3810 NORTH TULSA STREET, OKLAHOMA CITY, OKLAHOMA 73113
TELEPHONE (405) 947-2511

KEEP THIS FOLDER

File this for safekeeping. It may be valuable to you for service under the terms of the warranty.

Model # _____ Date of Purchase _____

Catalog # _____ Serial # _____

Name of Dealer _____

Little Giant Pump Company