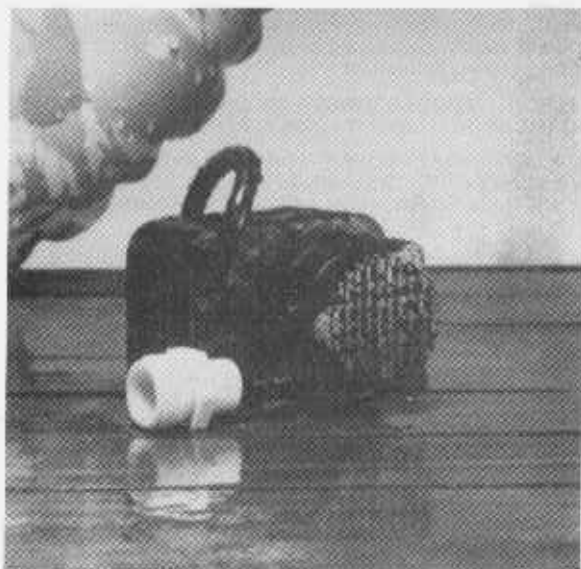




SMALL SUBMERSIBLE ENCAPSULATED PUMPS PE-1-PCP



- INSTALLATION
- OPERATION

- MAINTENANCE
- REPAIR PARTS

INTRODUCTION

This instruction sheet will provide you with information required to safely own and operate Little Giant PE-1-PCP Series pump. The pump you have purchased is a submersible epoxy encapsulated pump with outer case constructed of durable polyester. The case is filled with a special heat transfer epoxy.

This instruction sheet covers the standard models of the PE-1-PCP 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.

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 APPLICATIONS, 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.



Little Giant Pump Company
P. O. Box 12010
Oklahoma City, OK 73157-2010
(405) 947-2511 • Fax: (405) 947-8720

INTRODUCTION

Enclosed with your Little Giant pump is an instruction sheet which provides you with information required to safely own and operate your Little Giant pump. The instruction sheet primarily covers the standard models of each pump series. The form is applicable to other models in the series not listed by catalog number in the replacement parts list section of the instruction sheet. If the catalog number of your pump is not listed in the replacement parts list section, then caution should be exercised when ordering replacement parts. Always give the catalog number of your pump when ordering replacement parts.

The Little Giant unit you have purchased is of the highest quality workmanship and material it has been engineered to give you long and trouble-free service. The Little Giant pumps are carefully packaged, inspected and tested to insure safe operation and delivery. When you receive your pump, examine it carefully to determine that there are no broken or damaged parts that may have occurred during shipment. If damage has occurred, make notation and notify the firm that you purchased the pump from. They will assist you in replacement or repair, if required.

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. Make certain that the unit is disconnected from the power source before attempting to service or remove any component.
2. 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.
3. Do not handle pump with wet hands or when standing on a wet or damp surface or in water.
4. This pump is supplied with a grounding conductor and/or grounding type attachment plug. To reduce the risk of electric shock, be certain that it is connected to a properly grounded grounding type receptacle.
5. 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, a backup system(s) and/or alarm should be used.
6. 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.
7. If pump is an oil-filled pump, the motor housing is filled with a dielectric lubricant at the factory for optimum motor heat transfer and lifetime lubrication of the bearings. Use of any other lubricant could cause damage and void the warranty. This lubricant is non-toxic; however, if it escapes the motor housing, it should be removed from the surface quickly by placing newspapers or other absorbent material on the water surface to soak it up, so aquatic life is undisturbed.

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 prong is to ground the pump to prevent possible electrical shock hazard. **DO NOT REMOVE** the third prong from the plug. A separate branch circuit is recommended. Do not use an extension cord. Do not cut 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 (blue or white) and the (brown or black) are live.
- CONSULT INSTRUCTION SHEET ILLUSTRATIONS FOR PROPER ASSEMBLY AND DISASSEMBLY OF YOUR LITTLE GIANT PUMP.

LIMITED WARRANTY

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, PP-1, PPS-1, PP-12, PPS-12, and PP-230) 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 at the option of Little Giant 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 3810 North Tulsa, Oklahoma City, OK 73112. 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 Pump Company 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:

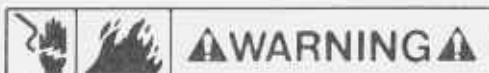
1. Sealed motor housing opened.
2. Product connected to voltage other than indicated on nameplate.
3. Cord cut off to a length less than three feet.
4. Pump allowed to operate dry (fluid supply cut off).
5. Pump used to circulate anything other than fresh water, light oils, or other mild liquids at approximately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

The National Electric Code (in the USA) and similar codes in other countries require a Ground Fault Circuit Interrupter (GFCI) to be installed in the branch circuit supplying fountain equipment rated above 15 volts. 115 volt GFCI's (with various cord lengths) are in stock, and we recommend each pump be used with a GFCI.

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 PUMP 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 ELECTRIC SHOCK, BE CERTAIN THAT IT IS CONNECTED TO A PROPERLY GROUNDED GROUNDING TYPE RECEPTACLE PROTECTED BY A GROUND FAULT CIRCUIT INTERRUPTER.
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 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, 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.
8. THIS PUMP IS INTENDED FOR DRAINING SWIMMING POOL COVERS ONLY AND SHOULD NOT BE USED IF THERE ARE PEOPLE IN THE POOL.

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

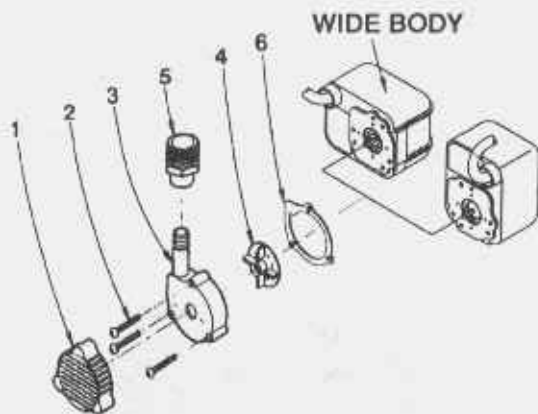
1. The PE-1-PCP model pumps must be operated with the volute intake below the liquid level.
2. The pump can be placed in any position.
3. The volute of these pumps can be rotated 90° to allow for different pump orientations. To rotate the volute, remove the three screws (item 2). Remove and rotate the volute and gasket and reinstall the three screws in the additional holes in the front of the pump housing. NOTE: DO NOT USE EXCESSIVE TORQUE ON THE VOLUTE SCREWS WHICH COULD CAUSE THE HOLES TO STRIP OUT.
4. 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.
5. Do not attempt to restrict the intake 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 tubing is used a clamp can be used on the tubing to restrict the flow.
6. 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.
7. 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.
2. First remove the intake screen from the pump. Screen is snapped on and can be removed by pulling. Then remove the 3 screws which attach the volute.
3. Lightly clean any corrosion or debris which may clog the impeller. Use a brush and penetrating oil and lightly scrape to remove encrusted material.
4. 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, un-plug 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 or its authorized service center. DO NOT attempt repairs yourself.
5. Be certain power cord is in good condition and contains no nicks or cuts.



ITEM NO.	L.G. P/N	PARTS DESCRIPTION	QTY.
1	118901	INTAKE SCREEN	1
2	902517	SCREW, 8-18 x 1.06" SST	3
3	101375	VOLUTE, SMOOTH	1
4	118441	IMPELLER	1
5	599022	ADAPTOR	1
6	101604	GASKET	1

**LIMITED
WARRANTY****LITTLE GIANT WARRANTY STATEMENT****LIMITED
WARRANTY**

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, PPS-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 products returned under warranty will be fully inspected to determine "CAUSE OF FAILURE" before any 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 his 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 exclusion 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:

- | | |
|---|--|
| <ol style="list-style-type: none"> 1. Sealed motor housing opened. 2. Product connected to voltage other than indicated on name plate. 3. Cord cut off to a length less than three feet. 4. Pump allowed to operate dry (fluid supply cut off). | <ol style="list-style-type: none"> 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. |
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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 73112
 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 _____