PE-1-1F-1F • PE-2F • PE2.5F-1F

Submersible Pumps

Submersible, water transfer or recirculation, water displays, air-conditioning and machine tool coolants

- 1/200 HP epoxy-encapsulated motor (518039)
- 1/40 HP epoxy-encapsulated motor (518477)
- 1/35 HP epoxy-encapsulated motor (518638)
- Glass-filled polyester housing and cover
- Polypropylene volute and screen
- Nitrile shaft seal
- Submersible use only
- IP 68
- **PE-1** Measurement: H:91mm X 88mm X 70mm
- **PE-2** Measurement: H:106mm X 123mm X 70mm
- **PE-2.5** Measurement: H:99mm X 102mm X 114mm

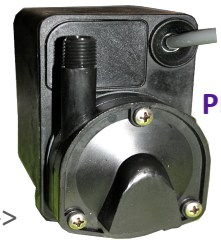
PE-1F-1F + PE-1H

The PE-1 + PE-2 can also come with a 'Hooded Volute' for lower pick up

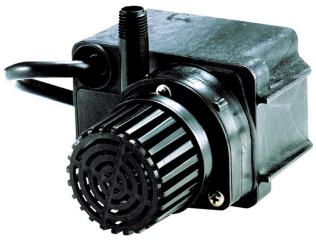
Contact us for more info

PE-1-1F-1F	
Capacity:	11 LPM @ 0.31m
Shut Off:	1.37m
Discharge:	6mm Threaded (Tube:12.5mm I.D.)
Intake:	Screened
Electrical:	230V, 50Hz, 0.3A, 40 Watts
MODEL:	**518039**
PE-2F	
Capacity:	18 LPM @ 0.31m
Shut Off:	1.37m
Discharge:	6mm Threaded (Tube:12.5mm I.D.)
Intake:	Screened
Electrical:	230V, 50Hz, 0.4A, 45 Watts
MODEL:	**518477**
PE-2.5F-1F	
Capacity:	30 LPM @ 0.31m
Shut Off:	1.37m
Discharge:	6mm Threaded (Tube:12.5mm I.D.)
Intake:	Screened
Electrical:	230V, 50Hz, 0.3A, 40 Watts
MODEL:	**518678**

This is a 'H' Hooded Volute->

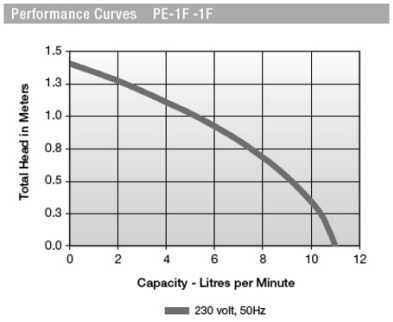


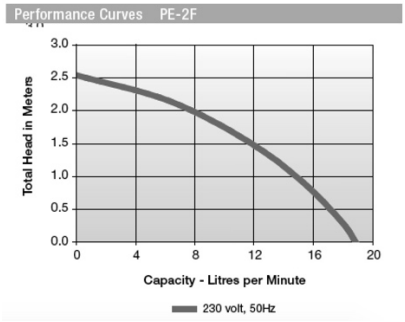
PE-2F + PE-2H

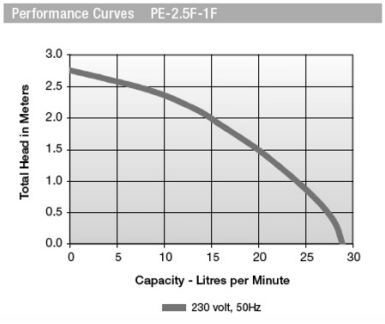


PE-2.5F-1F

[The PE-2.5 cannot be altered to a hooded volute intake]







PE-1 Introduction

This instruction sheet provides you with the information required to safely own and operate your Little Giant product. Retain these instructions for future reference.
The Little Giant product you have purchased is of the highest quality workmanship and material, and has been engineered to give you long and reliable service. Little Giant 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 LITTLE GIANT 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

Make certain that the unit is disconnected from the power source before attempting to service or remove 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.

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

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; this 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.
OPERATION

1. This pump must be operated in clean fresh water with the volute intake below the liquid level.
2. This pump can be placed in any position.
3. The volute on this pump can be rotated 90° to allow for different pump orientations. To rotate the volute, remove the three volute 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; THIS COULD CAUSE THE HOLES TO STRIP OUT.
4. The weight of the pump must be supported adequately. DO NOT support the pump by the discharge connection alone. Pump may be supported by using the two mounting holes in the back of the pump. The holes are designed for #8 self-tapping screws. DO NOT exceed the hole depth of .37".
5. Do not restrict the intake side of the pump; this may cause damage to the seal and may starve the pump. If you require reduced flow rates, place a valve on the discharge side of the pump or, if flexible vinyl tubing is used, a clamp 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 SERVICE INSTRUCTIONS section. Do not let the unit freeze in the wintertime. This may cause cracking or distortion that may destroy the unit.
8. If fused type plug is used on 230 volt units, a 1.0 amp fuse is recommended.

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. The power cord on these units cannot be replaced. In case of damage the whole unit must be replaced.
2. First remove the intake screen from the pump. Then remove the three screws as indicated by the arrows. (DO NOT remove other screws that may be exposed.)
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. Turntheimpellerbyhandtomakesureitturnsfreely.Setpumpdownsothepump 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 the pump to an authorized service center. DO NOT attempt repairs yourself.
5. Be certain power cord is in good condition and contains no nicks or cuts.

PE-2 SERIES OPERATION

1. The PE-2 model pumps must be operated with the volute intake below the liquid level.
2. The pumps can be placed in any position.
3. The volute on these pumps can be rotated 90° to allow for different pump orientations. To rotate the volute, remove the

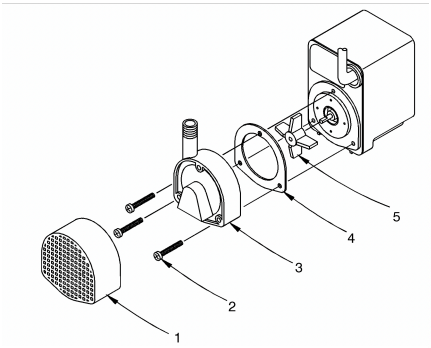
   three volute screws (item 2). Remove and rotate the volute and gasket and reinstall the three screws in the additional holes in the front of the pump housing. NOTE: DO NOT USE EXCESSIVE TORQUE ON THE VOLUTE SCREWS WHICH COULD CAUSE THE HOLES TO STRIP OUT.

4. The weight of the pumps must be supported adequately.DONOT 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 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.
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.
8. If fused type plug is used on 230 volt units, a 2.0 amp fuse is recommended.

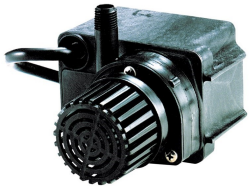
SERVICE INSTRUCTIONS

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. The power cord on these units cannot be replaced. In case of damage the whole unit must be replaced.
2. First remove the intake screen from the pump. Screen is snapped on and can be removed by pulling. Then remove the three 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, 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 the pump to an authorized service center. DO NOT attempt repairs yourself.
5. Be certain power cord is in good condition and contains no nicks or cuts.



ITEM	PART NO.	DESCRIPTION	QTY.	CATALOG NUMBER/MODEL	
				518400 PE-2H	518438 PE-2F-1F
1	102376	Intake screen	1	•	•
2	902420	Screw, 8-18 X 1¼" SST	3	•	•
3	102332	Volute, hooded	1	•	
3	102375	Volute, 3/8" FPT	1		•
4	102601	Gasket	1	•	•
5	102703	Impeller	1	•	•



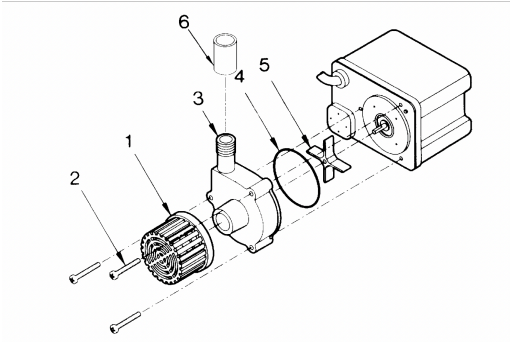
PE-2.5 SERIES

OPERATION

1. The PE-2.5 model pumps must be operated with the volute intake below the liquid level.
2. The pumps can be placed in any position.
3. The weight of the pump must be supported adequately. DO NOT support the pumps by the discharge connection alone. Pump 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 run dry (without liquid). 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.
7. The adaptor (item 6) is a press on style with no threads for connecting fountain heads with 1/2" MNPT to the 3/8" MNPT pump discharge.
8. If fused type plug is used on 230 volt units, a 2.0 amp fuse is recommended.

SERVICE INSTRUCTIONS
MAKE CERTAIN 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. The power cord on these units cannot be replaced. In case of damage the whole unit must be replaced.
2. First remove the intake screen from the pump. Screen is screwed on and can be removed by turning counter clockwise. 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, 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 the pump to an 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.	LITTLE GIANT PART #	DESCRIPTION	QTY.
1	118911	Intake Screen Assy	1
2	902420	Screw, 8-18 X 1¼" SST	3
3	118358	Volute	1
4	928011	Square Cut Seal	1
5	118444	Impeller	1
6	941001	Adaptor	1