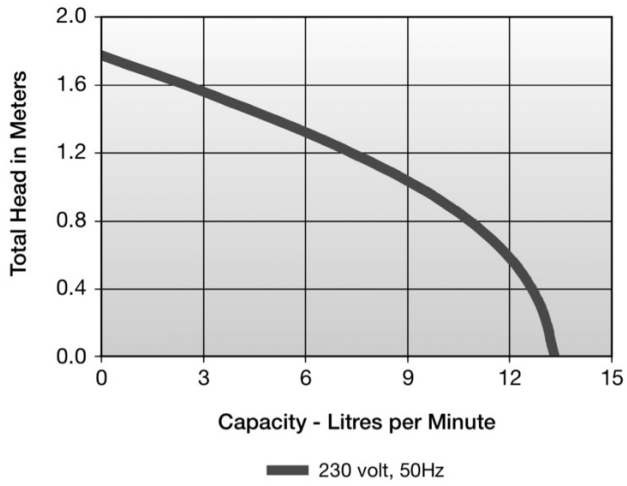
MODEL 1 Submersible Pump

Water transfer or recirculation, and water displays

- 1/150 HP oil-filled, direct drive motor
- Designed for continuous duty - submersible use only
- Epoxy-coated cast aluminium housing and cover
- Polypropylene volute and elbow
- Nitrile shaft seal
- Polyethylene screen
- IP 68

Capacity:	13 LPM @ .31m
Shut Off:	1.89m
Liquid Temp:	49°C
Discharge:	12.5 mm O.D.
Intake:	Smooth
Electrical:	230V, 50Hz, 0.5A,52W
MODEL:	**501038**

Performance Curve Model 1



#1 SERIES
Introduction

This instruction sheet provides you with the information required to safely own and operate your Little Giant pump. Retain these instructions for future reference.
The Little Giant pump you have purchased is of the highest quality workmanship and material, and has been engineered to give you long and reliable service. Little Giant pumps are carefully tested, inspected, and packaged to ensure safe delivery and operation. Please examine your pump 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 PUMP. KNOW THE PUMP'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

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 fall, 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.

OPERATION

1. 1.The #1 style pump must be run submerged. The pump should be placed with the screen as a base. If the surface is sandy or muddy, provide a smooth surface for the pump to be placed on.
2. The 1-42 style pumps are designed to be run in-line or submerged. They can be positioned in any attitude, but preferably the volute should be located to the side. This will allow the motor to be completely covered with the lubricating oil. IMPORTANT: When used in-line, they must be installed so that the pump head (volute) is flooded

before starting. That is, the inlet of the pump must be below the level of the surface of the liquid being pumped. (See Figure 1.)

3. The 1-MA pumps should be operated completely submerged and should be placed in an upright position with the volute on the side of the pump.
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 (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. 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. Do not, in any case, open the sealed portion of the unit or remove housing screws. The power cord on these units cannot be replaced. In case of damage the whole unit must be replaced.
2. Periodic cleaning of the pump parts will prolong the life and efficiency of the pump. Refer to Figure 2 for the assembly and disassembly of the pumping head.
3. First remove the intake screen from the pump. Then remove the three 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 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.

Figure 1