



## 6-CIA Cast Iron Submersible Sump Pump

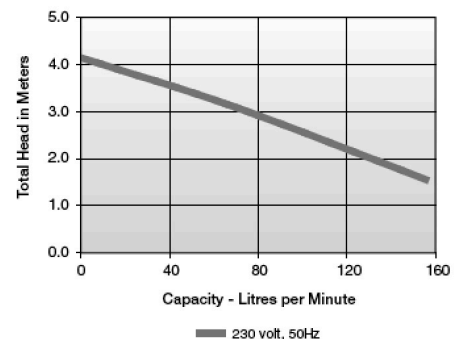
Basement sumps, dewatering, water transfer

- 1/3 HP shaded pole motor
- Designed for continuous duty
- Epoxy-coated cast iron housing
- 32 mm garden hose adapter available
- Carbon/ceramic shaft seal
- Upper and lower sintered sleeve bearings
- IP 68
- Height: 152mm Length: 241mm Width: 215mm



<b>Capacity:</b>	156 LPH @31m
<b>Shut Off:</b>	4.1m
<b>Discharge:</b>	38mm
<b>Electrical:</b>	230V, 50/60Hz, 4.5A, 720W
<b>MODEL:</b>	<b>506166</b>

Performance Curves



### 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. This product has been 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:** Risk of electric shock. 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.

**WARNING:** Always disconnect the electrical power before touching the pump or discharge when water is present in the sump. Failure to do so can result in hazardous electrical shock.

**WARNING:** To reduce the risk of electrical shock, pull plug before servicing this pump.

Read all instructions and Safety Guidelines thoroughly. Failure to follow the guidelines and instructions could result in serious bodily injury and/or property damage.

Check local electrical and building codes before installation. The installation must be in accordance with their regulations.

During normal operation the sump pump is immersed in water. Also, during rain storms, water may be present in the surrounding area of the pump. Caution must be used to prevent bodily injury when working near the pump:

Electrical power should be disconnected prior to touching, servicing or repairing the pump.

To minimize possible fatal electrical shock hazard, extreme care should be used when changing fuses. Do not stand in water while changing fuses or insert your finger into the fuse socket.

Do not run the pump in a dry sump. If the pump is run in a dry sump, the surface temperature of the pump will rise to a high level. This high level could cause skin burns if the pump is touched and will cause serious damage to your pump.

Do not oil the motor. The pump housing is sealed. A high grade dielectric oil devoid of water has been put into the motor housing at the factory. Use of other oil could cause serious electric shock and/or permanent damage to the pump.



This pump's 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 motor section of your pump is permanently lubricated and sealed - do not attempt to open this section. Special equipment and knowledge is required for proper servicing of this part of your pump and may only be accomplished by an Authorized Service Center or the factory. Your warranty will be void if the motor section is opened by unauthorized persons.

## ELECTRICAL CONNECTIONS

**WARNING:** Always disconnect the electrical power before touching the pump or discharge when water is present in the area of the pump. Failure to do so can result in hazardous electrical shock.

1. Your sump pump is supplied with a stripped wire cord end. The end of the power cord is to be wired in an electrical enclosure. Be sure that electrical connection cannot be reached by rising water. Under no circumstances should the outlet box be located where it may become flooded or submerged by water. The power cord is color coded as follows, green (or green/yellow) - ground, black (or brown) - line, and white (or blue) - neutral.
2. A separate branch circuit is recommended. Do not use extension cords.
3. Automatic power cord contains a breather tube. Be sure power cord is not pinched so that breather tube is obstructed. Non-restrictive air flow in breather tube is required for proper operation.
4. Test the pump after all electrical connections have been made. Run water into area where pump is to be placed. Do not attempt to run the pump without water; this could result in permanent damage to the pump. Fill the area to a normal "on" level and allow the pump to remove water to a normal "off" level.

## INSTALLATION

Little Giant automatic sump pumps have a high volume pumping capacity with a pressure activated switch. The switch engages in 7" - 10" water.

1. Clean any debris from sump pit and set pump in center of pit (Figure 1). A solid bottom will prevent clogging of the pump from sand and dirt.
2. Connect discharge piping and run it to the nearest sewer or surface outlet. Use pipe joint compound at all connections. Sump pumps can be piped to discharge into the house drainage system, to a dry well, splash block or to a storm drain, depending on local plumbing codes.  
The discharge pipe should be as short as possible and contain as few elbows as possible. The discharge pipe should be the same diameter as the discharge size to reduce pipe friction losses. Smaller pipe will restrict capacity and reduce pump performance. The sump pump comes with 1 1/2" female pipe thread discharge, and 1 1/4" FNPT reducing bushing.
3. Always install a union in the discharge line, just above the sump pit, to allow for easy removal of the pump for cleaning or repair.
4. In situations where the piping is long, the vertical discharge is above 7 or 8 feet, or a small pit has been provided, use of a check valve is recommended to prevent backflow of water into the sump. When a check valve is used, drill a relief hole (1/8" or 3/16" diameter) in the discharge pipe. This hole should be located below the floor line between the pump discharge and the check valve. Unless such a relief hole is provided, the pump could "air lock" and will not pump water even though it will run.
5. Tape power cord to discharge line with electrician's tape. This will protect the cord from damage and will prevent the pump's being pulled from the sump by its power cord.
6. TEST THE PUMP AFTER ALL CONNECTIONS HAVE BEEN MADE. Run water into sump. Do not attempt to operate the pump without water; this will damage the seals and bearings and could result in permanent damage to the pump. Fill sump to normal "on" level and allow pump to remove water to the normal "off" level (Figure 1).
7. Place cover over sump. This cover will prevent solid debris from filling the pit, prevent odors, and guard against accidental injury.