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› Little Giant 6-CIA 1/3 Horsepower Submersible Sump Pump Instruction Manual

Little Giant 6-CIA

Little Giant 6-CIA 1/3 Horsepower Submersible Sump Pump Instruction Manual

Model: 6-CIA | Brand: Little Giant

INTRODUCTION

This manual provides essential information for the safe and efficient installation, operation, and maintenance of your Little Giant 6-CIA 1/3 Horsepower Submersible Sump Pump. This pump is designed for use in basins or lift stations and is suitable for pumping clear water. It features a 1-1/2 inch female pipe thread discharge and includes a 1-1/4 inch FNPT reducing bushing. 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 1/3 HP shaded pole motor includes overload protection and is designed for continuous duty. Typical applications include commercial, industrial, and home uses where liquid must be transferred or recirculated.

KEY FEATURES

- **1/3 HP Motor:** 1/3 horsepower shaded pole motor with overload protection.
- **High Flow Rate:** 46 GPM at 5-inch head, 2760 GPH.
- **Durable Construction:** Epoxy-coated cast iron housing for longevity.
- **Continuous Duty:** Designed for reliable, continuous operation.
- **Integral Diaphragm Switch:** Automatic operation with a built-in diaphragm pressure switch.
- **Bearings:** Upper and lower sintered sleeve bearings.

SETUP

Before installation, ensure the pump and diaphragm switch are unplugged from the outlet to prevent electrical shock. The Little Giant 6-CIA is designed for installation in a sump pit or lift station. Ensure the pump is placed on a solid, level surface within the pit.

Discharge Piping

The pump comes with a 1-1/2 inch female pipe thread discharge. A 1-1/4 inch FNPT reducing bushing is included for smaller diameter piping if required. Connect appropriate discharge piping, ensuring all connections are secure and leak-free. Local plumbing codes should be consulted for proper discharge methods.

Electrical Connection

The pump operates on 115V, 50/60Hz power and comes with a 10-foot cord. Always connect the pump to a grounded outlet. For automatic

operation, the integral diaphragm switch will activate the pump when the water level reaches 7-10 inches and deactivate it when the water level drops to 1-4 inches.

6-CIA SERIES AUTOMATIC SUBMERSIBLE SUMP PUMP

Delivers up to 2760 gph – ideal for residential or light commercial sump systems.



Image: Little Giant 6-CIA Sump Pump installed in a basement sump pit, illustrating typical application. The pump is submerged in water within the pit, with discharge piping extending upwards.

6-CIA AUTOMATIC SUBMERSIBLE SUMP PUMP

Steel carry handle

Epoxy-coated cast aluminum housing

Standard integral diaphragm switch
On: 7" – 10"
Off: 1" – 4"

1/3 hp, 115-volt continuous-duty shaded pole motor with thermal overload protection

1-1/2" FNPT discharge

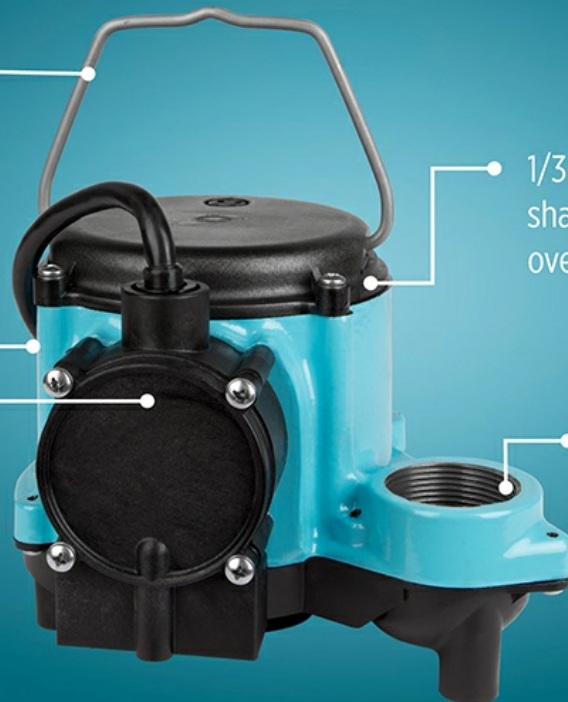


Image: Detailed view of the Little Giant 6-CIA Automatic Submersible Sump Pump, highlighting its key components including the steel carry handle, epoxy-coated cast aluminum housing, standard integral diaphragm switch, 1/3 hp 115-volt continuous-duty shaded pole motor with thermal overload protection, and 1-1/2 inch FNPT discharge.

Your browser does not support the video tag.

Video: This video provides an overview of the 10 key components of the Little Giant 6 Series Sump Pump, detailing their function and importance for installation, operation, and maintenance.

OPERATING INSTRUCTIONS

The Little Giant 6-CIA is an automatic submersible sump pump, meaning it operates based on water levels detected by its integral diaphragm switch.

Automatic Operation

Once properly installed and plugged into a grounded 115V outlet, the pump will automatically turn on when the water level rises to between 7 and 10 inches. It will continue to pump water until the level drops to between 1 and 4 inches, at which point it will automatically shut off. This ensures continuous protection against water accumulation without manual intervention.



Image: The Little Giant 6-CIA Sump Pump, highlighting its integral diaphragm switch. This switch is designed to avoid snags on pipes or basin walls, ensuring smooth operation in compact areas. It activates when water reaches 7-10 inches and turns off at 1-4 inches.

LittleGIANT®

6 SERIES

SUBMERSIBLE SUMP PUMPS



The Little Giant 6 Series submersible sump pumps are built for continuous duty use in a wide range of residential and light industrial applications. These durable, epoxy-coated cast iron 1/3 hp pumps deliver flow rates up to 2760 gph. Multiple switch options and cord lengths are available to suit different needs. Models equipped with piggyback switches offer added versatility, as they can be manually overridden for emergency water removal or general water transfer tasks.

Image: The Little Giant 6-CIA Series Sump Pump, shown submerged and actively pumping water. This submersible pump is capable of moving 46 gallons per minute (GPM) and is rated for continuous duty, making it ideal for residential or light commercial sump systems.

MAINTENANCE

Regular maintenance ensures the longevity and optimal performance of your sump pump. Always unplug the pump from the power source before performing any maintenance.

Diaphragm Switch Cleaning

The diaphragm switch can sometimes accumulate debris, preventing proper operation. To clean it, locate the hole on the bottom of the diaphragm switch and the clear tube on the end of the plug. Use a can of compressed air or an air compressor to blow out any debris lodged internally. Ensure air passes completely through the tube.

Screen, Impeller, and Volute Passage Cleaning

Periodically inspect and clean the pump's screen, impeller, and volute passage. Remove the screws holding the base to the volute, separate the components, and clean any accumulated debris. This will help maintain efficient water flow and prevent clogs.

Your browser does not support the video tag.

Video: This video demonstrates maintenance tips for Little Giant products featuring a diaphragm switch, including how to clear blockages and test the switch's functionality.

TROUBLESHOOTING

If your pump is not operating as expected, consider the following:

- **Pump not turning on:** Check if the pump is properly plugged into a grounded outlet. Inspect the diaphragm switch for any debris that might be preventing it from activating. Clean as described in the Maintenance section.
- **Pump not turning off:** Ensure the water level drops sufficiently (1-4 inches) for the diaphragm switch to deactivate. Check for any obstructions around the switch or within the pump that might keep it engaged.
- **Reduced flow:** Inspect the screen, impeller, and volute passage for clogs or debris. Clean thoroughly if any are found.

If troubleshooting steps do not resolve the issue, contact Little Giant technical support or visit their website for replacement parts and further assistance.

SPECIFICATIONS

Brand	Little Giant
Model Number	506158
Horsepower	0.33 HP (1/3 HP)
Voltage	115 Volts
Power Source	Corded Electric
Maximum Flow Rate	46 Gallons Per Minute (2760 GPH)
Maximum Lifting Height	18 Feet
Discharge Size	1-1/2 inch FNPT (with 1-1/4 inch reducing bushing)
Item Weight	17 Pounds
Product Dimensions (L x W x H)	24.1L x 21.6W x 15.2H Centimetres
Material	Cast Iron
Colour	Blue

WARRANTY

The Little Giant 6-CIA Submersible Sump Pump comes with a **Limited One-Year Warranty** from the manufacturer. Please refer to the warranty documentation included with your product for full terms and conditions.

SUPPORT

For technical assistance, replacement parts, or any questions regarding your Little Giant 6-CIA Sump Pump, please visit the official Little Giant website or contact their customer support. Contact information can typically be found in the product packaging or on the

manufacturer's website.

ASK A QUESTION ABOUT THIS MANUAL

Ask about setup, troubleshooting, compatibility, parts, safety, or missing instructions. Manuals+ will review the question and use this page's manual context to help answer it.

Name

Anonymous

Email

you@example.com

After a successful submission, we securely hash the supplied account or form email before sending it to Microsoft Advertising for conversion attribution. [Privacy details](#).

Question

Example: How do I reset this device or fix this error?

Details

Model number, symptoms, what you tried, or the section of the manual you are using.

Submit question