

## Pre-Installation

### INTENDED USE



**NOTE:** Use in applications involving salt water or brine will void the warranty. This unit is not designed for that application.

This submersible utility pump operates manually and is intended for numerous applications, including decorative ponds and waterfalls, general water transfer jobs, draining of flooded basements areas. The unit operates efficiently on a 115V, 60Hz., single phase, permanent split capacitor motor that includes a 15 ft. long, 18 gauge, 3-prong power cord.

### MAINTENANCE FREE MOTOR

The motor is maintenance-free. Neither the motor nor ball bearings require further lubrication. Additionally, the motor is protected from overheating and damage. It automatically shuts off with sudden rises in temperature and restarts after cooling down. The motor is oil-free, and is cooled by the pumped water.

### UNPACKING AND INSPECTION

Handle carefully. Check the packing list to account for all items. Visually inspect for shipping damage. If damaged, do not install and use this pump. Contact Customer Service.

### SPECIFICATIONS

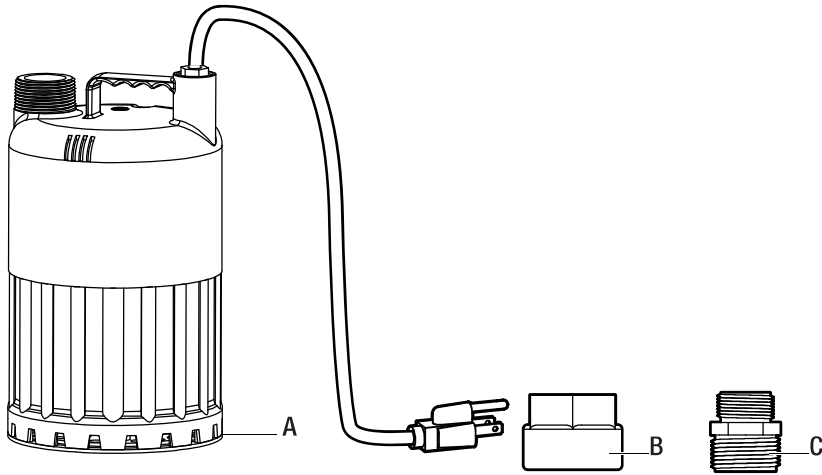
<b>Discharge Size</b>	1-1/4 MNPT
<b>Power Supply</b>	115V, 60 Hz
<b>Motor Duty</b>	Continuous
<b>Min. Amps for Dedicated Circuit</b>	15 Amps
<b>Temperature Range of Pumped Liquids</b>	32°F to 104°F
<b>Discharge Adaptor Size</b>	1 in. x 3/4 in. Hose

### PERFORMANCE DATA

SKU	HP	Volt	Amps	GPH of Water @ Total Feet of Head					Max. Head
				0 Ft.	5 Ft.	10 Ft.	15 Ft.	20 Ft.	
1002 166 126	1/2	115V	3.3A	3180	2700	2160	1620	960	26 Ft.

**Pre-Installation (continued)**

**PACKAGE CONTENTS**



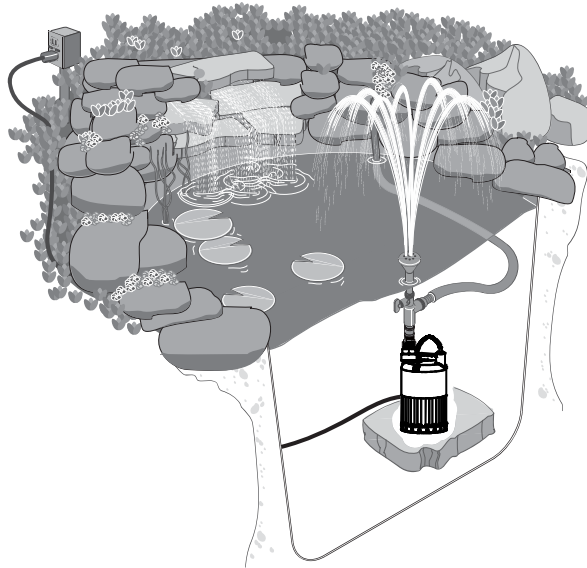
Part	Description	Quantity
A	Pump	1
B	Adaptor	1
C	Threaded adaptor	1

## Installation



**IMPORTANT:** Carefully thread all connections into the pump body to avoid stripping or crossing threads.

1. Install the pump on a firm, level base. Ensure the pump will not draw in rocks, debris, mud, etc. If necessary, place a cement block under the pump to raise it slightly. If used with a fountain jet, position the pump so that the fountain jet is above the surface of the water.
2. Make sure the power cord is protected from damage. Uncovered cords should be checked for wear or any damage before each use. **NEVER** start a pump with a damaged cord.
3. Select the appropriate adapter and attach it to the pump.
4. If used in a garden pond, adjust the diverter valve to control the fountain spray height and flow over the waterfall. Do not restrict pump suction to adjust flows. Restricting the suction will starve the pump for water and can damage the pump.
5. If the pump is connected to a pond filter, adjust the diverter valve to provide adequate flow to the filter. Refer to the filter instruction manual to determine flow requirement of the filter.
6. Lower pump into water before powering on. The pump has an air relief valve built-in to prevent air-lock. Air lock can also be quickly broken by tilting the pump to horizontal then back to upright to allow air to escape. It can take several seconds to break air lock if relying solely on air relief valve, this is normal.



**Typical Garden Pond and Waterfall Installation**



**NOTE:** The fountain accessories are not included with this pump.

## Operation



**WARNING:** Secure the discharge hose before plugging in the pump. Pump torque may cause an unscrewed discharge hose to “whip”, possibly causing personal injury and/or property damage.



**WARNING:** Do not let the plug fall in water and do not stand in water while the pump is plugged in. The pump will start operating when the power cord is plugged into the outlet.



**IMPORTANT:** Inspect hoses thoroughly before each use, making certain that all connections are secure and the hoses are in good condition.



**IMPORTANT:** The seal for the shaft depends on water for lubrication. Never use the pump unless it is submerged in water, as the seal may be damaged if allowed to run dry.



**IMPORTANT:** The pump will not remove all water entirely. If suddenly no water comes out of the discharge hose, the manually operated pump must be shut OFF immediately. The water level is probably too low for the pump to be effective.



**IMPORTANT:** Always keep the pump inlet clean. If the ground or area where the pump is placed is dirty, raise the pump to reduce the amount of debris being pulled into the pump inlet.



**IMPORTANT:** The pump can operate when water does not completely cover the motor housing, but the inlet must be totally submerged or it will break suction. This causes the water not to move, and may damage the shaft seal.



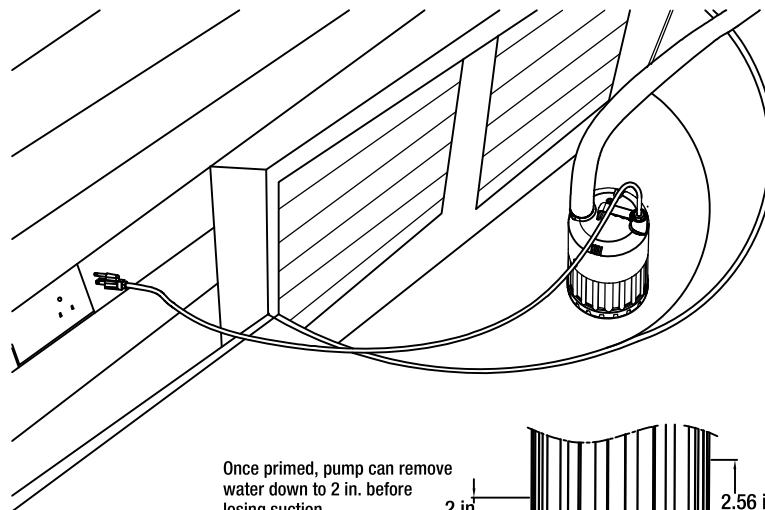
**IMPORTANT:** This pump is intended to pump cold water only. Pumping heated liquids could potentially overheat the motor and cause the thermal overload to trip, shutting off the unit.



**IMPORTANT:** Make sure you unwind the garden hose or discharge hose completely. Kinks in the hose will restrict the pump, preventing it from priming, which is the first step to pumping water. The water level must be at 2-1/2 in. for the pump to prime and operate.

Lower pump into water before powering on. The pump has an air relief valve built-in to prevent air-lock. Air lock can also be quickly broken by tilting the pump to horizontal then back to upright to allow air to escape. It can take several seconds to break air lock if relying solely on air relief valve, this is normal.

Plug the pump into a 115V GFCI power outlet.



Once primed, pump can remove water down to 2 in. before losing suction.

Minimum Water depth needed to prime

Install the pump on a firm, level base. Avoid pumping mud, rocks and debris.