

Installation Manual

486000C

SPAC-Series Pre-Assembled Basins

Models

SPAC-237

SPAC-257

SPAC-457

SPAC-S37

SPAC-S37-P

*All Models Available with ALM-P1
or ALM-P1-EYE Alarm*



SPACs are designed for indoor use only

IMPORTANT: All Liberty Pumps products are supplied with their own separate Installation/Operation/Maintenance manuals. Ensure receipt of these manuals, and that they are read and understood prior to installation. For questions, call Liberty Pumps customer service at 800-543-2550.



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Keep this manual handy for future reference.

For replacement manual, visit LibertyPumps.com,
or contact Liberty Pumps at 800-543-2550.

Retain dated sales receipt for warranty.

NOTICE

Installer: Manual must remain with owner or system operator/maintainer.

Prior to installation, record information from pump nameplate for future reference:

System: _____

Model(s): _____

Serial(s): _____

Mfg Date: _____

Install Date: _____

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Safety Guidelines

	This safety alert symbol is used in the manual and on the pump to alert of potential risk for serious injury or death.
	This safety alert symbol identifies risk of electric shock . It is accompanied with an instruction intended to minimize potential risk of electric shock.
	This safety alert symbol identifies risk of fire . It is accompanied with an instruction intended to minimize potential risk of fire.
	This safety alert symbol identifies risk of serious injury or death . It is accompanied with an instruction intended to minimize potential risk of injury or death.
⚠ DANGER	Warns of hazards which, if not avoided, will result in serious injury or death.
⚠ WARNING	Warns of hazards which, if not avoided, could result in serious injury or death.
⚠ CAUTION	Warns of hazards which, if not avoided, could result in minor or moderate injury.
NOTICE	Signals an important instruction related to the pump. Failure to follow these instructions could result in pump failure or property damage.

⚠ WARNING Read every supplied manual before using pump system. Follow all the safety instructions in manual(s) and on the pump. Failure to do so could result in serious injury or death.

Safety Precautions

⚠ WARNING **RISK OF ELECTRIC SHOCK**

- Accidental contact with electrically live parts, items, fluid, or water can cause serious injury or death.
- Always disconnect pump(s) from power source(s) before handling or making any adjustments to either the pump(s), the pump system, or the control panel.

- All installation and maintenance of pumps, controls, protection devices, and general wiring shall be done by qualified personnel.
- All electrical and safety practices shall be in accordance with the National Electrical Code®, the Occupational Safety and Health Administration, or applicable local codes and ordinances.
- Do not remove cord and strain relief, and do not connect conduit to pump.
- Pump shall be properly grounded using its supplied grounding conductor. Do not bypass grounding wires or remove ground prong from attachment plugs. Failure to properly ground the pump system can cause all metal portions of the pump and its surroundings to become energized.
- Do not handle or unplug the pump with wet hands, when standing on damp surface, or in water unless wearing Personal Protective Equipment.
- Always wear dielectric rubber boots and other applicable Personal Protective Equipment (PPE) when water is on the floor and an energized pump system must be serviced, as submerged electrical connections can energize the water. Do not enter the water if the water level is higher than the PPE protection or if the PPE is not watertight.
- Do not lift or carry a pump or a float assembly by its power cord. This will damage the power cord, and could expose the electrically live wires inside the power cord.
- The electrical power supply shall be located within the length limitations of the pump power cord, and for below grade installations it shall be at least 4 ft (1.22 m) above floor level.
- Do not use this product in applications where human contact with the pumped fluid is common (such as swimming pools, fountains, marine areas, etc.).
- Protect the power and control cords from the environment. Unprotected power and control (switch) cords can allow water to wick through ends into pump or switch housings, causing surroundings to become energized.

⚠ WARNING **RISK OF FIRE**

- Do not use an extension cord to power the product. Extension cords can overload both the product and extension cord supply wires. Overloaded wires will get very hot and can catch on fire.
- This product requires a separate, properly fused and grounded branch circuit, sized for the voltage and amperage requirements of the pump, as noted on the nameplate. Overloaded branch circuit wires will get very hot and can catch on fire. When used, electrical outlets shall be simplex of the appropriate rating.
- Do not use this product with or near flammable or explosive fluids such as gasoline, fuel oil, kerosene, etc. If rotating elements inside pump strike any foreign object, sparks may occur. Sparks could ignite flammable liquids.
- These pumps are not to be installed in locations classified as hazardous in accordance with the National Electric Code®, ANSI/NFPA 70.

⚠️ WARNING  **RISK OF SERIOUS INJURY OR DEATH**

- Do not modify the pump/pump system in any way. Modifications may affect seals, change the electrical loading of the pump, or damage the pump and its components.
- All pump/pump system installations shall be in compliance with all applicable Federal, State, and Local codes and ordinances.
- Do not allow children to play with the pump system.
- Do not allow any person who is unqualified to have contact with this pump system. Any person who is unaware of the dangers of this pump system, or has not read this manual, can easily be injured by the pump system.
- Wear adequate Personal Protective Equipment when working on pumps or piping that have been exposed to wastewater. Sump and sewage pumps often handle materials that can transmit illness or disease upon contact with skin and other tissues.
- Do not remove any tags or labels from the pump or its cord.
- Keep clear of suction and discharge openings. To prevent injury, never insert fingers into pump while it is connected to a power source.
- Do not use this product with flammable, explosive, or corrosive fluids. Do not use in a flammable and/or explosive atmosphere as serious injury or death could result.
- This product contains chemicals known to the State of California to cause cancer and birth defects or other reproductive harm. www.p65warnings.ca.gov.

NOTICE

- ◆ Do not dispose of materials such as paint thinner or other chemicals down drains. Doing so could chemically attack and damage pump system components and cause product malfunction or failure.
- ◆ Do not use these pumps with fluid over 140°F (60°C). Operating the pump in fluid above this temperature can overheat the pump, resulting in pump failure.
- ◆ Do not use pump system with mud, sand, cement, hydrocarbons, grease, or chemicals. Pump and system components can be damaged from these items causing product malfunction or failure. Additionally, flooding can occur if these items jam the impeller or piping.
- ◆ Do not run dry.
- ◆ SPAC pre-assembled basins are designed for indoor use only.

Introduction

Pump and optional alarm are supplied with their own separate manuals. Ensure receipt of these manuals, and that they are read and understood prior to installing and using this system. Familiarity with the pump and optional alarm is critical.

This manual provides a brief overview of the system and deals mainly with installation of the system. It does not cover the specifics of the pump or optional alarm operation. For questions, call Liberty Pumps customer service at 800-543-2550.

Model Specifications

For more SPAC-Series information, refer to <http://www.LibertyPumps.com/Product/SPAC-Series>. The pump nameplate provides a record of the specific pump information.

Application

SPACs are designed as drop-in sump pump solutions for residential applications and are designed for indoor use only. These systems come completely pre-assembled from the factory for a simple and worry-free installation.

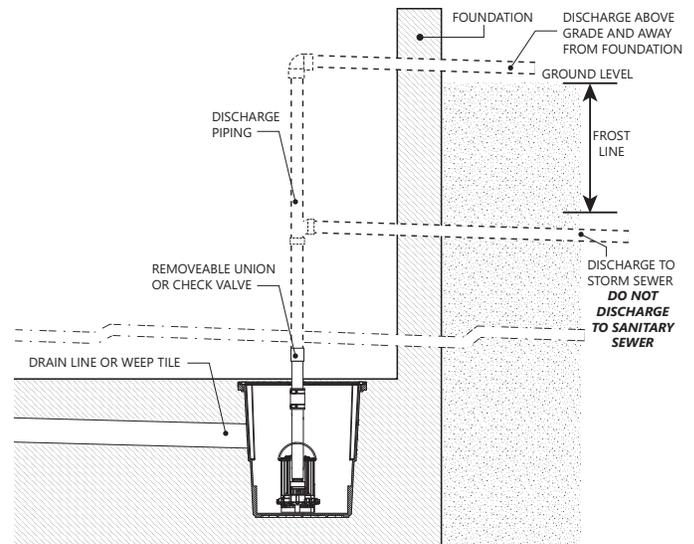


Figure 1. Typical Residential Installation

Installation

⚠️ WARNING  **RISK OF ELECTRIC SHOCK**

- All installation and maintenance of pumps, controls, protection devices, and general wiring shall be done by qualified personnel.
- All electrical and safety practices shall be in accordance with the National Electrical Code®, the Occupational Safety and Health Administration, or applicable local codes and ordinances.

Inlet Line

SPAC systems are supplied with two 4" rubber grommets. In order to install an inlet pipe, a 5" diameter hole must first be drilled on the side of the basin using a hole saw. Insert the supplied grommet into the recess where the hole was just drilled. Finally, slide the pipe into the grommet until it is fully seated against the stop. If an additional inlet pipe is desired, repeat the steps for the opposite side of the tank.

Discharge Line

SPAC systems are supplied with a 1-1/2" Schedule 40 PVC discharge pipe. The discharge pipe extends 4" above the basin cover. It is recommended that a compression style fitting is used to connect the system to the permanent plumbing within the home. The permanent plumbing should discharge the water to an area that will drain away from the building and foundation.

Check Valve

SPACs are not supplied with check valves. Liberty Pumps requires check valves to prevent water from draining back into the basin through the discharge piping. When using a check valve, the discharge line must be protected from freezing by running the discharge deep enough below ground level to be beneath the frost line. See Figure 1.

Power Cord

The pump power cord is equipped with a grounding conductor and grounding-type 3-prong plug. It shall be connected to a separately fused, grounded, 3-wire grounding-type receptacle of 15 Amp capacity with the proper 115 V. Verify all electrical wiring and connections are in accordance with the National Electric Code® and all applicable local codes.

Back-up Pumps and Alarms

The basin additionally provides a pedestal location for a back-up pump if desired for added protection. Consider the **Liberty Pumps SJ10A SumpJet** (water powered back-up pump) or **Model 441 or 442** (battery powered back-up pumps). If no additional back-up pump is installed, and there is risk of property damage in the event of flooding due to loss of pump operation, **Liberty Pumps Alarms (ALM-P1 or ALM-P1-EYE)** should be considered as an additional means of protection.

Operation

WARNING **RISK OF SERIOUS INJURY OR DEATH**

- Energizing the control panel or breaker for the first time is potentially dangerous. Licensed electrical personnel should be present when the panel or breaker is energized for the first time. If faults caused by damage or poor installation practices have not been detected, serious damage, injury or death can result when power is applied.

Starting System

1. Verify all plumbing components in the basin are installed correctly and functional. Verify all valves are open and ready for pump use.
2. Double check all wire connections. Re-tighten all factory and field connections.
3. Ensure pump has no obstructions.
4. With all electrical and mechanical connections complete and secure, turn on power to pump.
5. Verify operation of the pump and alarm circuits.

6. Run several cycles of water through the system to verify correct control operation for the installation.

Maintenance and Troubleshooting

Refer to supplied pump and optional alarm manuals. For further questions, contact customer service at 800-543-2550 or support@LibertyPumps.com.

Warranty

Liberty Pumps Wholesale Products Limited Warranty

Liberty Pumps, Inc. warrants that Liberty Pumps wholesale products are free from all factory defects in material and workmanship for a period of three (3) years from the date of purchase (excluding batteries). The date of purchase shall be determined by a dated sales receipt noting the model and serial number of the pump. The dated sales receipt must accompany the returned pump if the date of return is more than three years from the date of manufacture noted on the pump nameplate.

The manufacturer's sole obligation under this Warranty shall be limited to the repair or replacement of any parts found by the manufacturer to be defective, provided the part or assembly is returned freight prepaid to the manufacturer or its authorized service center, and provided that none of the following warranty-voiding characteristics are evident:

The manufacturer shall not be liable under this Warranty if the product has not been properly installed, operated, or maintained per manufacturer instructions; if it has been disassembled, modified, abused, or tampered with; if the electrical cord has been cut, damaged, or spliced; if the pump discharge has been reduced in size; if the pump has been used in water temperatures above the advertised rating; if the pump has been used in water containing sand, lime, cement, gravel, or other abrasives; if the product has been used to pump chemicals, grease, or hydrocarbons; if a non-submersible motor has been subjected to moisture; or if the label bearing the model and serial number has been removed.

Liberty Pumps, Inc. shall not be liable for any loss, damage, or expenses resulting from installation or use of its products, or for indirect, incidental, and consequential damages, including costs of removal, reinstallation or transportation.

There is no other express warranty. All implied warranties, including those of merchantability and fitness for a particular purpose, are limited to three years from the date of purchase. This Warranty contains the exclusive remedy of the purchaser, and, where permitted, liability for consequential or incidental damages under any and all warranties are excluded.