

## Operating Instructions & Parts Manual

Please read and save these instructions. Read carefully before attempting to assemble, install, operate or maintain the product described. Protect yourself and others by observing all safety information. Failure to comply with instructions could result in personal injury and/or property damage! Retain instructions for future reference.

# Floating Pond Pump System

## Models FPS0501 and SPS0501

### Description

This pump system is designed for decorative use and can improve water aeration. It produces water fountains up to 15' in height, and up to 4,900 gallons of water per hour. Make your floating fountain system even more dramatic at night by adding the NightBright lighting system 023069.

Operates in 5 feet of water or deeper.



### Unpacking

When unpacking the unit, inspect carefully for any damage that may have occurred during transit.

For installation videos and other information, scan with your smart phone.



1. Introduction
2. Safety
3. Tools required
4. 115V installation
  - a. Pre-installation
  - b. Installation
5. 230V installation
  - a. Pre-installation
  - b. Installation - pump
  - c. Installation - control center
  - d. Setting timers
  - e. Setting the clock
6. Scheduled maintenance
7. Seasonal removal and storage

### General Safety Information

Carefully read and follow all safety instructions in this manual and on pump. Keep safety labels in good condition. Replace missing or damaged safety labels.



**This is a SAFETY ALERT SYMBOL.** When you see this symbol on the pump or in the manual, look for one of the following signal words and be alert to the potential for personal injury or property damage.

#### **▲ DANGER**

**Warns of hazards that WILL cause serious personal injury, death or major property damage if ignored.**

#### **▲ WARNING**

**Warns of hazards that CAN cause serious personal injury or death, if ignored.**

#### **▲ CAUTION**

**Warns of hazards that MAY cause minor personal injury, product or property damage if ignored.**

**IMPORTANT:** Indicates factors concerned with operation, installation, assembly or maintenance which could result in damage to the machine or equipment if ignored.

**NOTE:** Indicates special instructions which are important but are not related to hazards.



**▲ DANGER** Never enter the water either wading, swimming or in a boat with the pump power on, as this may result in severe electrical shock.



**▲ WARNING** Read these warnings and instructions carefully. Failure to follow could result in serious bodily injury and/or property damage.



**▲ WARNING** Electrical installations shall be in accordance with National Electric Code (NEC) and all applicable local codes and ordinances. A licensed electrician should perform installation.



**▲ DANGER** "NO SWIMMING" AND OR WARNING SIGNS SHOULD BE POSTED PER STATE AND LOCAL CODES. Please affix included warning label to power receptacle or junction box.



**▲ WARNING** System furnished with a 100ft power cord with three prong GFI plug. – Must connect to properly grounded receptacle of grounding type. Do not remove ground pin on plug. Do not extend the cord length by splicing or with an extension cord.



**▲ WARNING** FAILURE TO CONNECT THIS UNIT, WITH THE GFI, TO A PROPERLY GROUNDED RECEPTACLE MAY RESULT IN SEVERE ELECTRICAL SHOCK.



**▲ WARNING** Be sure system is connected to a circuit equipped with a fuse or circuit breaker of ample capacity.



**▲ DANGER** Always disconnect power source before performing any work on or near the motor or its connected load. If the power disconnect point is out-of-sight, lock it in the open position and/or tag it to prevent unexpected application of power. Failure to do so could result in fatal electrical shock or bodily injury.



**▲ DANGER** DO NOT handle pump with wet hands or when standing in water as fatal electrical shock could occur. Disconnect main power supply before handling system for any reason.



**▲ WARNING** Protect the power cable from coming in contact with sharp objects, oil, grease, hot surfaces or chemicals. DO NOT kink the power cable. If damaged replace immediately.



**▲ WARNING** NEVER leave the control box, fused disconnect switch, or covers open (either partially or completely) when not being worked on by a competent electrician or repairman.



**▲ DANGER** Always use caution when operating electrical controls in damp areas. If possible, avoid all contact with electrical equipment during thunderstorms or extreme damp conditions.



**▲ WARNING** Install all electrical equipment in protected area to prevent mechanical damage which could produce serious electrical shock and/or equipment failure.



**▲ DANGER** DO NOT use this system to pump flammable liquids such as gasoline, fuel oil, kerosene, etc. Failure to follow the above warning could result in property damage and/or personal injury.



**▲ CAUTION** Do not pump water above 120 degrees Fahrenheit.



**▲ CAUTION** Water leaving nozzle is at high velocity and can cause bodily injury if contact is made.



**▲ WARNING** This unit not tested for use in swimming pool areas.



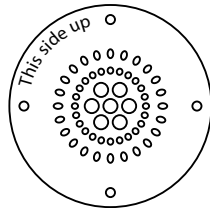
**▲ WARNING** GFI plug must be oriented with cord coming out the bottom and protected from direct rainfall.

## INSTALLATION INSTRUCTIONS

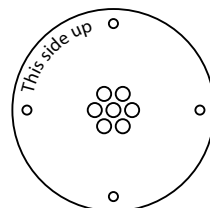
1. Only install this system in ponds where no swimming, wading, boating or fishing is allowed while fountain is operating. Disconnect power to pump before fishing or entering the water.
2. Post appropriate warning signs per local and state codes.
3. Inspect pump system for damage before installing in pond. Check that all bolts and screws are tight. Check for any bent prongs or a cracked case on the GFI.
4. The unit ships with one spray nozzle attached. To change to one of the other 2 nozzles, remove the 4 screws from the nozzle then replace with desired nozzle. Refer to Figures 1, 2 & 3 for spray pattern appearance. Nozzles are marked "This side up." Make sure the o-ring is seated in groove before installing nozzle. Tighten screws until seated, approximately 10 to 12 in-lbs.
5. Attach nylon anchor ropes to 2 eyebolts located at top of screen. Secure (make sure rope is tight) to weights placed on pond floor or stakes on pond shore. When using weights to anchor the pump, place weights approximately 10 feet from unit, 180 degrees apart.

6. Before connecting the unit to the power receptacle, check to insure there is no leakage to ground. This can be done by using an ohm meter and setting the scale to its highest setting (i.e. Rx100K). Connect one ohmmeter lead to the unit power cord ground (round prong) and to one of the flat prongs. It should read infinite or at least 2 mega ohms. Repeat with the other prong. If reading is below 2 mega ohms on either prong contact Customer Service Help Line listed at bottom of page.
7. **Do Not Operate System on an Extension Cord.** If no power is accessible at the pond, contract a licensed electrician to install the proper power supply in accordance with National Electric Code and all applicable local codes and ordinances.
8. After installing the unit, checking ground and connecting power to the unit, the unit can be powered up. Check operation of the GFI by pushing the "Test" button, the unit should stop. Pushing the "Reset" button should restart the unit. If pressing the "test" button does not stop the unit, immediately shut off power to unit and contact Customer Service Help Line listed at bottom of page.

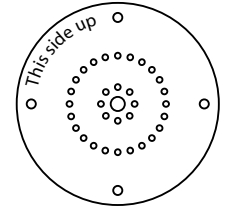
## NOZZLE PATTERNS



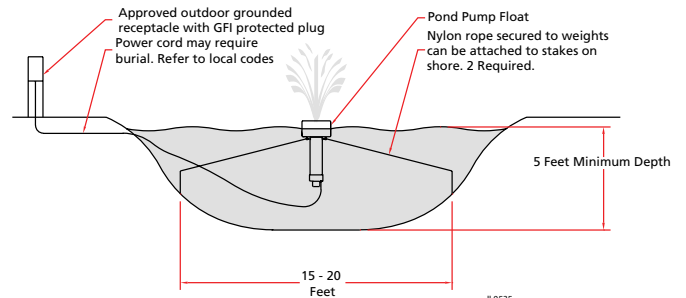
**Figure 1: Water Lily - An eye-catching combination spray. Item #2C**



**Figure 2: Sky Cannon - A dramatic single plume of water. Item #2B**



**Figure 3: Water Trumpet - A symmetrical inverted bell shape. Item #2A**



**Figure 4: Typical Installation**

## INSTALLATION CHECK LIST

- Read installation instructions and warnings
- Post appropriate warning signs
- Install desired spray nozzle
- Install and anchor unit in pond
- Check insulation resistance to ground
- Power up unit
- Test operation of GFI by pressing the "Test" Button.
- File instructions for future reference

## REQUIRED TOOLS & SUPPLIES

- #2 Phillips screwdriver
- Nylon rope to anchor unit
- Stakes or weights for anchoring unit
- Ohm meter to check insulation resistance to ground

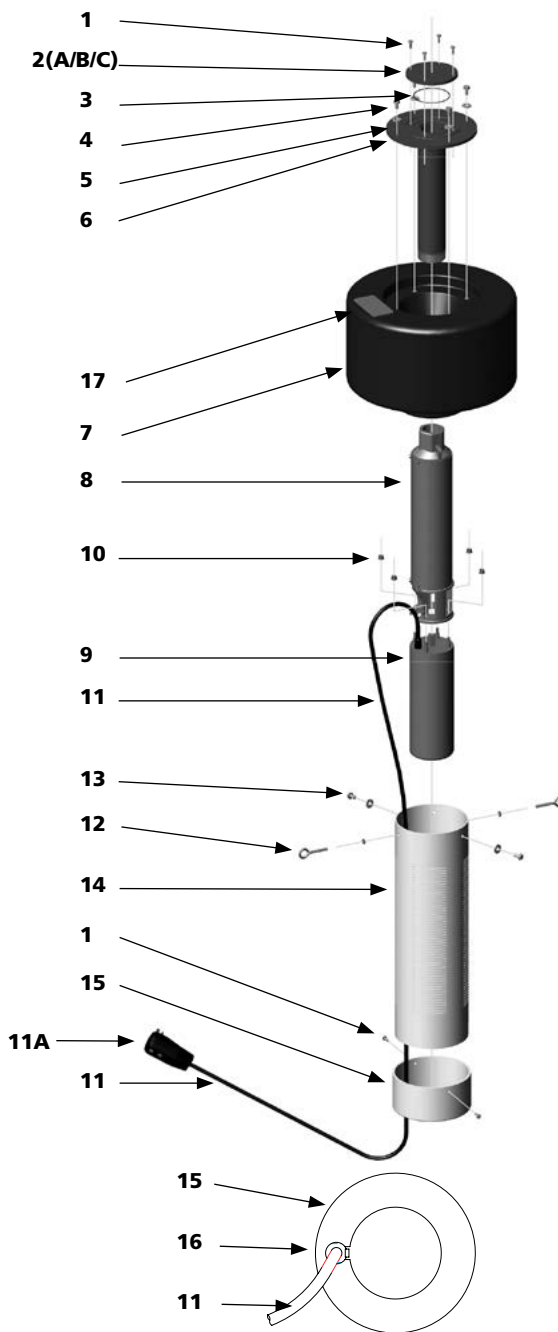
## ⚠ CAUTION WINTER STORAGE

- Rinse unit with clean water to remove any build-up on unit.
- Check unit for any damage.
- Store unit in heated space in freezing climates.

The pump motor is water lubricated and is factory filled with an antifreeze solution. During operation the antifreeze may exchange, thru the filtered check valve, with the pond water. In climates where freezing may occur, the unit must be stored in a heated storage space to prevent damage to the motor.

## TROUBLESHOOTING GUIDE

PROBLEM	POSSIBLE CAUSES	CORRECTIVE ACTION
Unit won't run	Circuit breaker tripped	Reset circuit breaker
	GFI Tripped	Reset GFI
No or low spray	Blocked screen or nozzle, missing or damaged o-ring, or incorrectly installed nozzle	Disconnect power. Clean screen and/or nozzle. Check that o-ring is undamaged and seated in groove. Check that nozzle is installed properly (nozzles are marked "This side up"). Check depth of pond. If less than 5 feet deep, move to deeper section. Restart unit.
GFI Trips	Electrical storm can trip GFI	Reset GFI
	Short in system	Disconnect power and check cord for damage. If cord is damaged contact Customer Service Help Line listed at bottom of page for replacement.
Unit spins	Anchor rope loose	Check anchor rope and re-attach if necessary



IL0538

Item #	Qty	Part No.	Description
*	6	*	Screw - #10 x 3/4 Slotted Head or Pan Head Sheet Metal Screw (18-8 Stainless Steel)
2A	1	021617	Nozzle - Water Trumpet
2B	1	021618	Nozzle - Sky Cannon
2C	1	021619	Nozzle - Water Lily
3	1	021622	O-Ring - AS568A - 041 (3" ID x 3/18" OD)
4	6	021628	Bolt - SS 1/4-20 x 3/4
5	6	021629	Lockwasher - 1/4"
6	1	021707	Mounting Flange
7	1	022912	Float
8	1	021713	Pump End
9	1	021740	Motor 1/2 HP 115V
10	4	127021	Locknut - SS 5/16-24
11	1	021715	100 ft. power cord with GFI
11A	1	021614	GFI
12	2	021609	Eye Bolt - SS 1/4-20 x 2-1/2
13	2	021623	Locknut - SS 1/4--20
14	1	022913	Screen
15	1	021611	Screen Cap
16	1	021613	Strain Relief
17	2	021625	Warning Decal

\*Standard hardware item, available locally

Flow (GPH)	Spray Height (Ft.)	Pattern Image	Pattern Name
4900	15		Water Lily - 2C
3300	15		Sky Cannon - 2B
2700	13		Water Trumpet - 2A