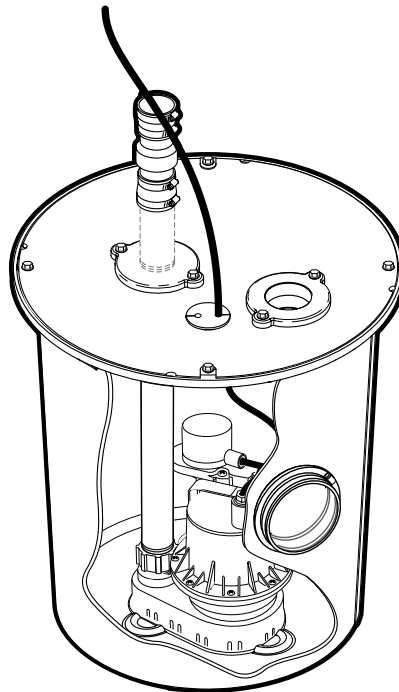


**MYERS®****PSB1822****Installation/Operation/Parts**

For further operating, installation,  
or maintenance assistance:

**Call 1-888-987-8677**

### SAFETY INFORMATION

Carefully read and follow all safety instructions in this manual or on pump.

**⚠** This is the safety alert symbol. When you see this symbol on your pump or in this manual, look for one of the following signal words and be alert to the potential for personal injury!

**⚠ DANGER** warns about hazards that *will* cause serious personal injury, death or major property damage if ignored.

**⚠ WARNING** warns about hazards that *can* cause serious personal injury, death or major property damage if ignored.

**⚠ CAUTION** warns about hazards that *will or can* cause minor personal injury or property damage if ignored.

The word **NOTICE** indicates special instructions which are important but not related to hazards.

1. **Read these rules and instructions carefully.** Failure to follow them could cause serious bodily injury and/or property damage.
2. Check your local codes before installing. You must comply with their rules.

**⚠ WARNING** Hazardous voltage. Can shock, burn or kill. During operation the pump is in water. To avoid fatal shocks, proceed as follows if pump needs servicing:

- 3A. Disconnect power to outlet box before unplugging pump.
- 3B. Unplug the pump before handling or servicing it.

- 3C. Take extreme care when changing fuses. Do not stand in water or put your finger in the fuse socket.
- 3D. Do not modify the cord and plug. When using the cord and plug, plug into a grounded outlet only. When wiring to a system control, connect the pump ground lead to the system ground.
4. Do not run the pump dry. Dry running can overheat the pump (causing burns to anyone handling it), and will void the warranty.
5. The pump normally runs hot. To avoid burns when servicing pump, allow it to cool for 20 minutes after shutdown before handling it.
6. The pump is permanently lubricated. No oiling or greasing is required in normal operation.
7. Do not install the basin and pump in any location classified as hazardous by the United States National Electrical Code (NEC), or by the Canadian Electrical Code (CEC), where applicable.

### PUMP SPECIFICATIONS

Power Supply Required ..... 115V, 60 Hz  
 Individual Branch Circuit Required.....15 Amps  
 Maximum Liquid Temperature..... 140°F (60°C)  
 Discharge Adapter..... 1-1/2" NPT

#### California Proposition 65 Warning

**⚠ WARNING** This product and related accessories contain chemicals known to the State of California to cause cancer, birth defects or other reproductive harm.

#### Limited Warranty

F.E. MYERS warrants to the original consumer purchaser ("Purchaser" or "You") of the products listed below, that they will be free from defects in material and workmanship for the Warranty Period shown below.

Product	Warranty Period
Jet pumps, small centrifugal pumps, submersible pumps and related accessories	<i>whichever occurs first:</i> 12 months from date of original installation, or 18 months from date of manufacture
Fibrewound Tanks	5 years from date of original installation
Steel Pressure Tanks	5 years from date of original installation
Sump/Sewage/Effluent Products	12 months from date of original installation, or 24 months from date of manufacture

Our warranty will not apply to any product that, in our sole judgement, has been subject to negligence, misapplication, improper installation, or improper maintenance. Without limiting the foregoing, operating a three phase motor with single phase power through a phase converter will void the warranty. Note also that three phase motors must be protected by three-leg, ambient compensated, extra-quick trip overload relays of the recommended size or the warranty is void. Your only remedy, and F.E. MYERS's only duty, is that F.E. MYERS repair or replace defective products (at F.E. MYERS's choice). You must pay all labor and shipping charges associated with this warranty and must request warranty service through the installing dealer as soon as a problem is discovered. No request for service will be accepted if received after the Warranty Period has expired. This warranty is not transferable.

F.E. MYERS SHALL NOT BE LIABLE FOR ANY CONSEQUENTIAL, INCIDENTAL, OR CONTINGENT DAMAGES WHATSOEVER.

THE FOREGOING LIMITED WARRANTIES ARE EXCLUSIVE AND IN LIEU OF ALL OTHER EXPRESS AND IMPLIED WARRANTIES, INCLUDING BUT NOT LIMITED TO IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE. THE FOREGOING LIMITED WARRANTIES SHALL NOT EXTEND BEYOND THE DURATION PROVIDED HEREIN.

Some states do not allow the exclusion or limitation of incidental or consequential damages or limitations on the duration of an implied warranty, so the above limitations or exclusions may not apply to You. This warranty gives You specific legal rights and You may also have other rights which vary from state to state. This Limited Warranty is effective June 1, 2011 and replaces all undated warranties and warranties dated before June 1, 2011.

**F.E. MYERS**  
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 Phone: 888-987-8677 • Fax: 800-426-9446 • [www.femyers.com](http://www.femyers.com)  
 In Canada: P. O. Box 9138, 269 Trillium Dr., Kitchener, Ontario N2G 4W5  
 Phone: 519-748-5470 • Fax: 888-606-5484

## DESCRIPTION

The Myers Sump Pump System, Model Number PSB1822, is ideal for basement and cellar installations. It includes a submersible sump pump and a corrosion-resistant sump basin and lid. The pump features a flush-mount system for maximum discharge of the basin. All components of the sump pump system are preassembled at the factory for easy installation.

This submersible pump is designed for sump drainage, dewatering and flood control. The pump has built-in thermal overload protection and an automatic reset. The mechanical seal and ball bearings on the motor shaft are permanently lubricated.

This system is designed for residential use only. The supplied hardware kit includes a rubber inlet hub, a cord grommet and an exterior check valve. No special tools or sealants are required.

**NOTICE:** This system is not designed for applications involving salt water or brine! Use with salt water or brine will void warranty.

Pump water only with this pump.

## INSTALLATION

### Piping

Piping must not be smaller than pump discharge.

### Electrical

**▲WARNING** Hazardous voltage. Can shock, burn, or kill. When installing, operating, or servicing this pump, follow the safety instructions listed below.

Do not lift pump by the power cord. See “Cord Lift Warning” on Page 5.

1. **DO NOT** splice the electrical power cord.
2. **DO NOT** allow the electrical cord plug to be submerged.

3. **DO NOT** use extension cords. They are a fire hazard and can reduce voltage sufficiently to prevent pumping and/or damage motor.
4. **DO NOT** handle or service the pump while it is connected to the power supply.
5. **DO NOT** remove the grounding prong from the plug or modify the plug. To protect against electrical shock, the power cord is a three-wire conductor and includes a 3-prong grounded plug. Plug the pump into a 3-wire, grounded, grounding-type receptacle. Connect the pump according to the NEC or CEC and local codes.

Connect or wire pump to its own individual branch circuit with no other outlets or equipment in the circuit. Size fuses or circuit breakers according to the “Pump, Motor, Switch and Cord Specifications” chart.

**▲WARNING** Risk of electrical shock and fire. Be sure that power supply information (Voltage/ Hertz/Phase) in this manual matches incoming power supply exactly. Install pump according to all electrical codes that apply.

**NOTICE:** Proper ventilation is needed to prevent negative basin pressure and to provide air within the basin.

The basin should be located at the lowest place in the basement or area to be drained. Floor drains from other areas in the basement may be tiled into the basin. Drain tile around a house foundation may also be tiled into the basin, effectively removing water and relieving pressure from this area.

Basin covers are used to exclude refuse from the basin.

## PERFORMANCE

Model	GPH (LPH) AT TOTAL FEET (METERS) OF LIFT				No flow at height shown below
	5 (1.5 m)	10 (3 m)	15 (4.6 m)	20 (6.1 m)	
PSB1822	1,585 (6,000)	1,230 (4,656)	830 (3,142)	240 (908)	22 ft (6.7 m)

\*For performance at maximum temperature see Catalog.

## PUMP, MOTOR, SWITCH & CORD SPECIFICATIONS

Motor HP	Nameplate Amps	Individual Branch Circuit Required (Amps)	Cord Length in ft. (m)	Switch Setting in inches (mm)		Discharge Adapter Size
				On	Off	
1/4	6.5	15	10 (3)	6 (152)	1-1/2 (38)	1-1/2"

### Installation Instructions. See Figure 1.

1. Dig the hole for the basin and the sub-base. The hole must be deep enough so the top of the basin is flush with the finished floor. Refer to Figure 1, Page 4.

**NOTICE:** The sub-base should include 4" of sand or gravel. The maximum diameter of crushed rock should be 1/2". The recommended maximum diameter of pea gravel is 3/4".

2. Level the sub-base out until it is smooth. Sharp rock can damage the basin.
3. Reach into the inlet hole to retrieve the hardware kit. Locate the cord grommet in the hardware kit.
4. Reach into the inlet hole again to pull the power cord up through the cord grommet hole in the cover. Press the cord into the cord grommet and install the grommet in the cover.
5. Locate the inlet hub in the hardware kit, and snap it into the inlet hole.
6. Install the basin on top of the sub-base.
7. Insert a 4" inlet pipe through the inlet hub. Insert it 2" into the basin. Dish soap can be used to lubricate the inlet hub. If necessary, file the sharp edges of the pipe to prevent damage to the hub.

**NOTICE:** The inlet pipe should pitch down to the basin inlet at 1/4" per foot. This will cause the water to run into the basin.

8. Backfill around the basin with crushed rock, with a maximum diameter of 1/2", or use pea gravel.
9. Install a 1-1/2" discharge pipe into the 1-1/2" FNPT discharge flange.
10. Install a 2" vent pipe into the 2" FNPT threaded vent flange. The vent pipe must go through the roof of the building or it can be connected to an existing vent pipe. The sump basin must be vented.

**NOTICE:** Proper ventilation is needed to prevent negative basin pressure and to provide the necessary air within the basin.

11. Install the 1-1/2" check valve (supplied) in the discharge pipe. See Figure 1. Make certain the flow indicating arrow points away from the pump. This check valve will keep the water from running back into the basin when the pump is not running.

**NOTICE:** To prevent clogging the pump, clear basin of any debris if you remove the cover during or after installation. **Unplug the pump first.**

12. Plug the pump into a properly grounded outlet.
13. Check the operation by filling the basin with water and observing pump operation through one complete cycle. Make sure that no parts of the assembly interfere with the float.

**⚠ WARNING** Failure to make this operational check may lead to improper operation, premature failure, and flooding.

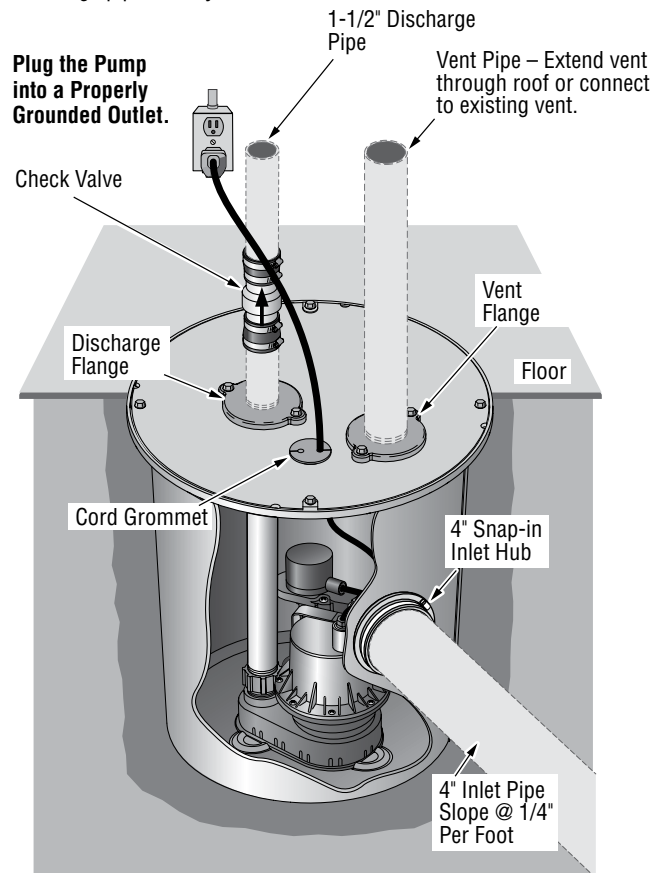
### OPERATION

**NOTICE:** The shaft seal depends on water for lubrication and cooling. Do not operate the pump unless it is submerged in water as the seal may be damaged if allowed to run dry. Allowing the pump to run dry will void the warranty.

An automatic overload protector in the motor will protect the motor from burning out due to overheating/overloading. When the motor cools down, the overload protector will automatically reset and start the motor.

If the overload trips frequently, check for the cause. It could be a stuck impeller, wrong/low voltage, or an electrical failure in the motor. If an electrical failure in the motor is suspected, have it serviced by a competent repairman.

Purchase inlet, vent and discharge pipes locally.



**Figure 1: Typical Installation**

The pump is permanently lubricated. No oiling or greasing is required.

**NOTICE:** The pump will not remove all water. For extended operation, water depth must be at least 5" (13 cm) to prevent motor overheating.

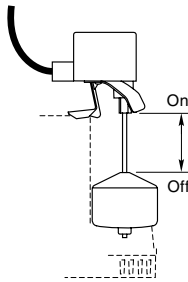
## Airlocks

When a pump airlocks, it runs but does not move any water. An airlock will cause the pump to overheat and fail. The discharge pipe is plumbed with a predrilled anti-airlock hole. Leakage from the anti-airlock hole is normal during pump operation.

## Float Switch – Operational Check

1. Fill the sump with the correct amount of water to check the operation and tightness of the connections. During the first automatic cycle, it may take 30 seconds or more before the pump is primed and pumping. The pump will start as indicated in the “Pump, Motor, Switch and Cord Specifications” table on Page 3.
2. Check the turn-off position. The pump will stop approximately as indicated in the “Pump, Motor, Switch and Cord Specifications” table on Page 3.
3. If the pump does not operate, check the electrical service.

The vertical float has a short range of motion along a vertical rod, which helps prevent the float from sticking.



## MAINTENANCE

**⚠ WARNING** Hazardous voltage. Can shock, burn, or kill. Before removing the pump from the basin for service, always disconnect electrical power to the pump and the control switch. Do not lift the pump by the power cord. See the “Cord Lift Warning” below.

**NOTICE:** To prevent clogging the pump, clear basin of any debris if you remove the cover during or after installation.

**Unplug the pump first.**

**NOTICE:** The pump should only be serviced by trained personnel. There are no consumer serviceable parts inside the pump.


Disconnect the discharge and vent pipes from the unit, remove the four basin cover bolts, and then lift the pump out of the basin using the pump handle.

DO NOT attempt to open the pump further than removing the bottom plate.

The pump motor housing contains a special lubricating oil which should be kept clean and free of water at all times.

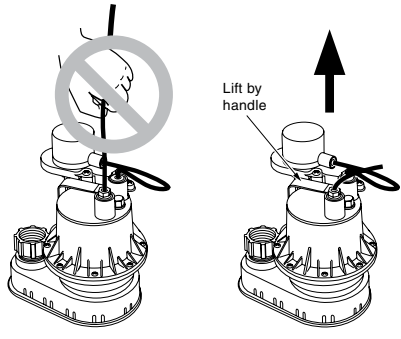
The sump basin and cover, pump, and piping should be protected from freezing temperatures.

**⚠ WARNING**



**Risk of electrical shock.  
Can burn or kill.  
Do not lift pump by  
power cord.**

### CORD LIFT WARNING



1. Attempting to lift or support pump by power cord can damage cord and cord connections.
2. Cord may pull apart, exposing bare wires with possibility of fire or electrical shock.
3. Lifting or supporting pump by power cord will void warranty.
4. Use handle on top of pump for all lifting/lowering of pump. Disconnect power to pump before doing any work on pump or attempting to remove pump from sump.

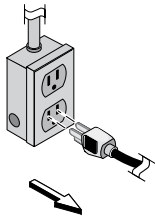
## TO CLEAN THE IMPELLER

Follow the steps shown below. To reassemble pump, reverse the sequence.

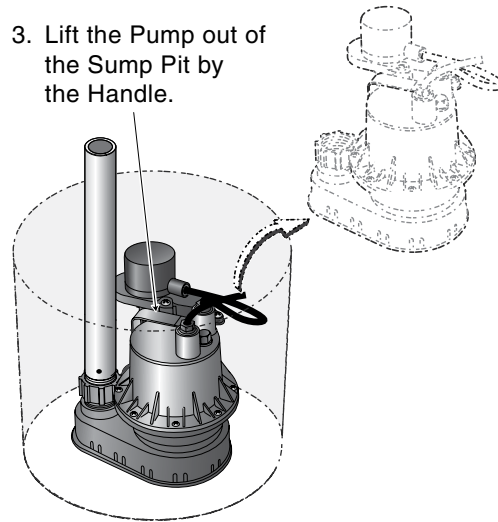
**⚠ WARNING** Risk of electrical shock. Can burn or cause death.

Before removing the pump from the sump for service, always disconnect the electrical power source to the pump. Do not raise, lower or carry the pump by the power cord. Use the handle provided on the pump.

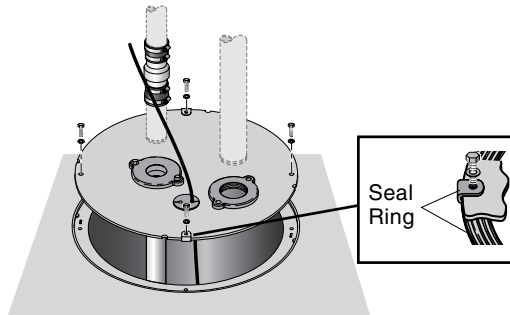
1. Unplug the Pump.



3. Lift the Pump out of the Sump Pit by the Handle.



2. Disconnect the discharge and vent pipes, and remove basin cover. Be sure you do not damage the seal ring.



4. Remove the Screws that hold the Bottom Plate and volute to the Pump Assembly and clean out the Impeller.

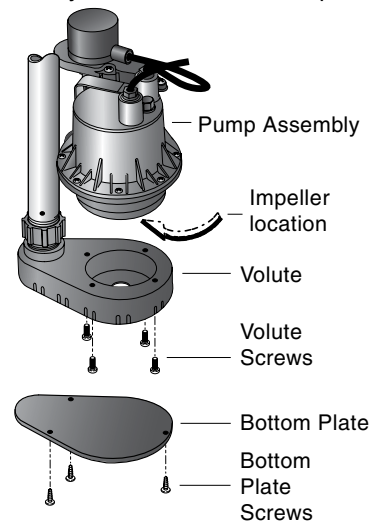
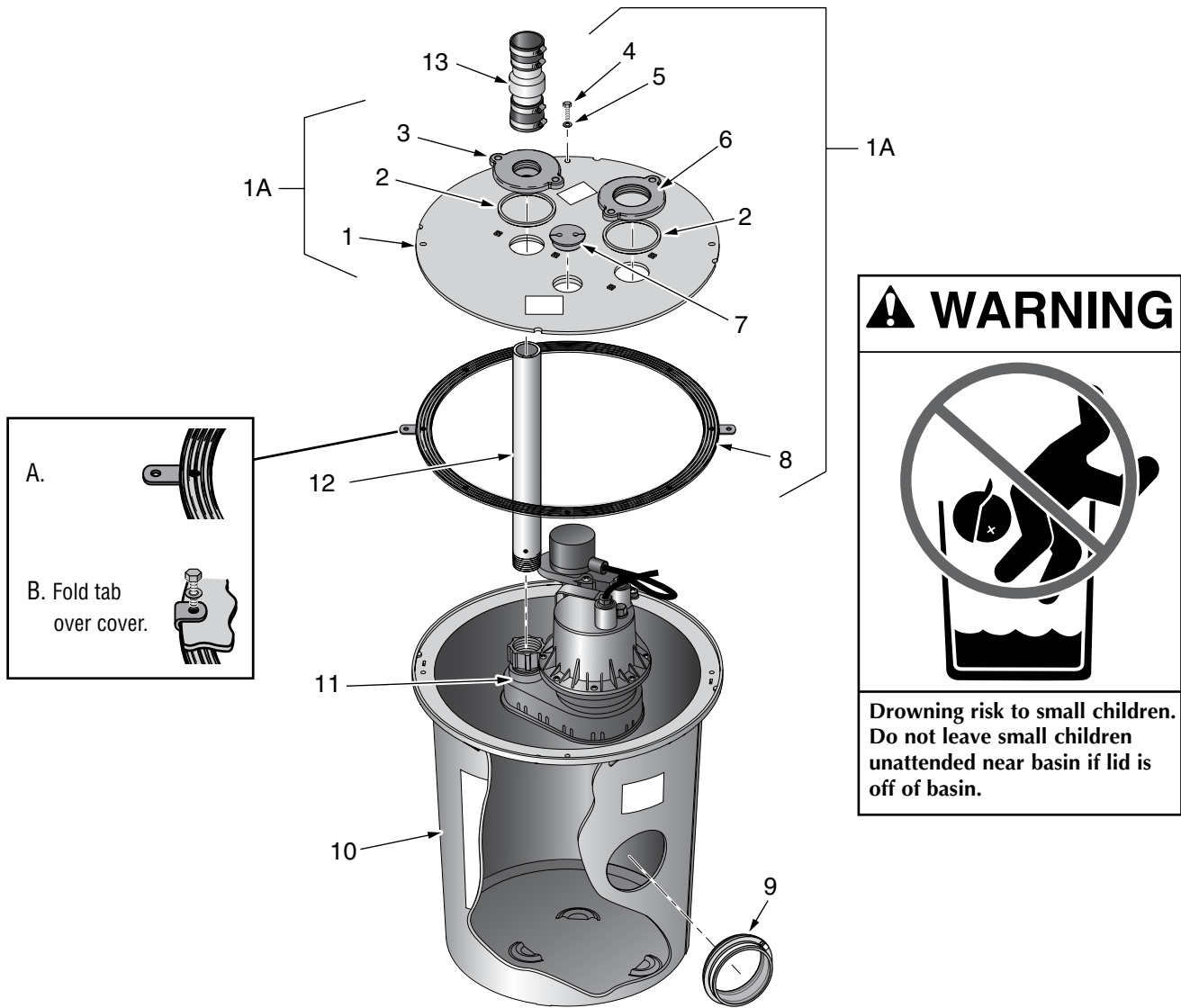
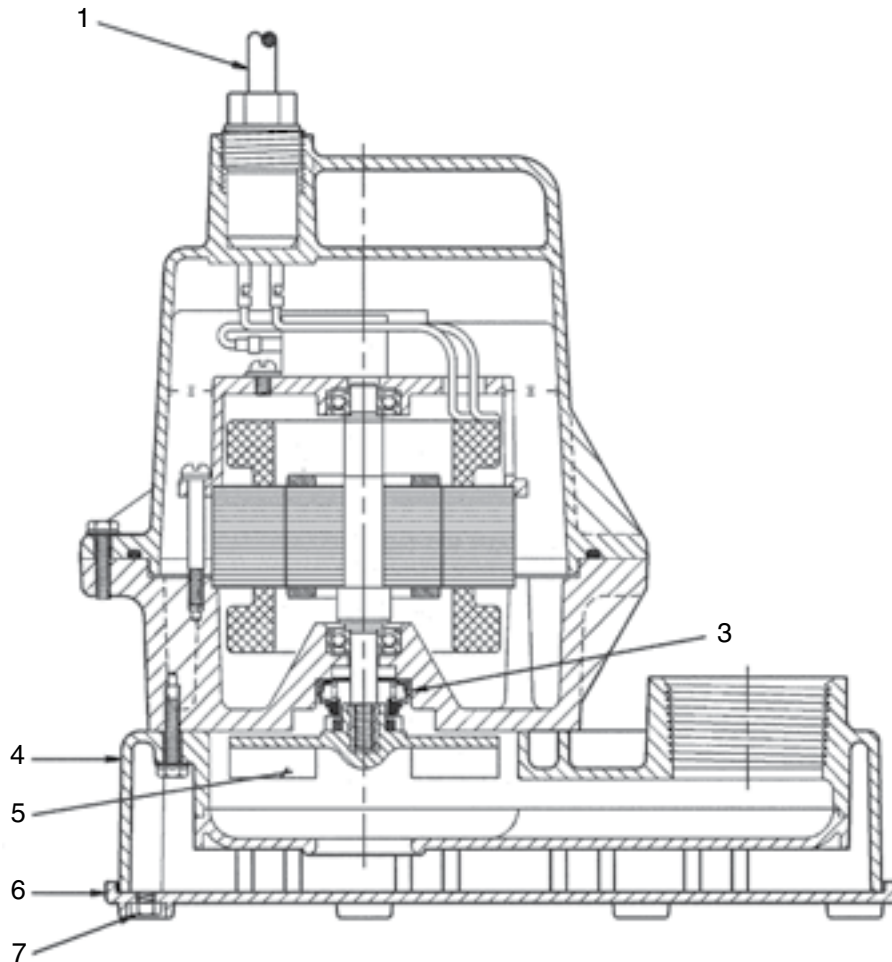


Figure 2: Impeller Cleaning



**REPAIR PARTS – PRE-PLUMBED SYSTEMS**

Key No.	Part Description	Qty.	PSB1822
1A	Basin Cover Assembly (Includes Nos. 1-8)	1	PW73-65P
1	Basin Cover	1	-
2	Square Cut O-Ring	2	-
3	Vent Flange, 2"	1	-
4	Basin Bolt	8	-
5	Flat Washer	8	-
6	Discharge Flange, 1-1/2"	1	-
7	Cord Grommet	1	-
8	Seal Ring	1	PW73-71
9	Inlet Hub, Snap-In	1	PW73-67
10	Sump Basin	1	-
11	Sump Pump	1	24683D050
12	Discharge Pipe	1	U37-689P
13	Check Valve	1	PW12-260



### REPAIR PARTS – PUMP

Key No.	Part Description	Qty.	Part No.
1	Power Cord 10'	1	21628B017
•	Vertical Switch	1	26292B100
•	Vertical Switch Bracket	1	26291B015
3	Shaft Seal	1	21607A001
4	Volute Case	1	24432C050
5	Impeller	1	24433B060
6	Bottom Plate	1	24432C003
7	Self-Tapping Screw	3	05910A012
•	Cable Clamp	1	22071A001

• Not illustrated.



**TROUBLES-REMEDIES**

**⚠ WARNING** Sudden Starts. If the power is on to the pump when thermal overload resets, the pump may start without warning. If you are working on the pump, you may get an electrical shock or the impeller may catch fingers or tools.

Disconnect the power before servicing the pump.

<p><b>A. Pump fails to operate:</b></p>	<ol style="list-style-type: none"> <li>1. Check to be sure that power cord is securely plugged into outlet or securely wired into controller or switch box. Disconnect power to outlet before handling pump or motor.</li> <li>2. Check to be sure you have electrical power.</li> <li>3. Check that liquid fluid level is high enough to activate switch or controller.</li> <li>4. Check to be sure that the anti-airlock vent hole in the pump discharge is not plugged.</li> <li>5. Check for blockage in pump inlet, impeller, check valve or discharge pipe.</li> <li>6. Disconnect the pump from the power source for a minimum of 30 minutes to allow the motor to cool and to protect yourself from sudden starts. See Warning above. Check for the cause of overheating. Pump is running dry because the float switch is caught up on something. Inlet pipe is plugged. Outlet pipe is plugged.</li> </ol>
<p><b>B. Pump fails to empty sump:</b></p>	<ol style="list-style-type: none"> <li>1. Be sure all valves in discharge pipe are fully open. Be sure check valve is installed with flow arrow pointing AWAY from pump.</li> <li>2. Clean out discharge pipe and check valve.</li> <li>3. Check for blockage in pump inlet or impeller.</li> <li>4. Pump not sized properly. A higher capacity pump may be required.</li> </ol>
<p><b>C. Pump will not shut off:</b></p>	<ol style="list-style-type: none"> <li>1. Check switch or controller automatic floats for proper operation and location. See installation instructions for switch/controller.</li> <li>2. If pump is completely inoperative or continues to malfunction, consult your local serviceman.</li> </ol>
<p><b>D. Fuse blows or circuit breaker trips when pump starts:</b></p>	<ol style="list-style-type: none"> <li>1. Clogged inlet holes in pump base or clogged impeller. Unplug pump, remove it from the basin, and clean.</li> <li>2. Defective motor. Replace pump.</li> <li>3. Fuse or circuit breaker too small. Connect pump to a 15 amp circuit.</li> </ol>
<p><b>E. Motor runs for a short time, then stops:</b></p>	<ol style="list-style-type: none"> <li>1. Clogged inlet holes in pump base or clogged impeller. Unplug pump, remove it from the basin, and clean.</li> <li>2. Defective motor. Replace pump.</li> </ol>

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