#### LIMITED WARRANTY - MAIN DRAIN UTILITY PUMPS:

Manufacturer warrants the products specified in this warranty to be free from defects in material or workmanship for one (1) year from date of purchase. During the time period and subject to the terms and conditions, Manufacturer will repair or replace to the original user or consumer any portion of this product which proves to be defective due to materials or workmanship. At all times Manufacturer shall have and possess the sole right and option to determine whether to repair or replace defective equipment, parts, or components. Manufacturer has the option to inspect any product returned under warranty to confirm that the warranty applies before repair or replacement under warranty is approved. This warranty sets forth Manufacturer's sole obligation and purchaser's exclusive remedy for defective product. For warranty consideration, call 1-800-495-9278.

#### **WARRANTY PERIOD - PRODUCTS:**

If, within the duration of product use by the original user, this product proves to be defective due to materials or workmanship, the product shall be repaired or replaced at Manufacturer's option, subject to the terms and conditions set forth in this warranty statement. Proof of purchase is required for warranty consideration. In the absence of suitable proof of the purchase date, the effective period of this warranty is 12 months from the product's date of manufacture.

#### LABOR, ETC. COSTS:

Manufacturer shall IN NO EVENT be responsible or liable for the cost of field labor or other charges incurred by any customer in removing and/or affixing any product, part, or component thereof.

#### PRODUCT IMPROVEMENTS:

Manufacturer reserves the right to change or improve its products or any portions thereof without being obligated to provide such a change or improvement for units sold and/or shipped prior to such change or improvement.

#### **GENERAL TERMS AND CONDITIONS:**

This warranty shall not apply to damage due to acts of God, normal wear and tear, normal maintenance services and the parts used in connection with such service, lightning or conditions beyond the control of Manufacturer, nor shall it apply to products which, in the sole judgment of Manufacturer, have been subject to negligence, abuse, accident, misapplication, tampering, alteration; nor due to improper installation, operation, maintenance or storage; nor to excess of recommended maximums as set forth in the instructions. Warranty will be VOID if any of the following conditions are found:

- 1. Product is used for purposes other than those for which it was designed and manufactured
- 2. Product not installed in accordance with applicable codes, ordinances, and good trade practices
- 3. Product connected to voltage other than indicated on nameplate or labels
- 4. Pump exposed to but not limited to the following: sand, gravel, cement, grease, plaster, mud, tar, oil, gasoline, solvents or other abrasive or corrosive substances
- 5. Pump has been used for pumping liquids above 120°F
- 6. Pump allowed to operate dry (liquid supply cut off)

#### DISCLAIMER:

Any oral statements about the product made by the seller, Manufacturer, the representatives, or any other parties do not constitute warranties, shall not be relied upon by the user, and are not part of the contract for sale. Seller's and Manufacturer's only obligation, and buyer's only remedy, shall be the replacement and/or repair by Manufacturer of the product as described above. NEITHER SELLER NOR MANUFACTURER SHALL BE LIABLE FOR ANY INJURY, LOSS OR DAMAGE, DIRECT, INCIDENTAL OR CONSEQUENTIAL (INCLUDING, BUT NOT LIMITED TO, INCIDENTAL OR CONSEQUENTIAL DAMAGES FOR LOST PROFITS, LOST SALES, INJURY TO PERSON OR PROPERTY, OR ANY OTHER INCIDENTAL OR CONSEQUENTIAL LOSS), ARISING OUT OF THE USE OR THE INABILITY TO USE THE PRODUCT, AND THE USER AGREES THAT NO OTHER REMEDY SHALL BE AVAILABLE TO IT. Before using, the user shall determine the suitability of the product for his/her intended use, and user assumes all risk and liability whatsoever in connection therewith.

THE WARRANTY AND REMEDY DESCRIBED IN THIS LIMITED WARRANTY IS AN EXCLUSIVE WARRANTY AND REMEDY AND IS IN LIEU OF ANY OTHER WARRANTY OR REMEDY, EXPRESSED OR IMPLIED, WHICH OTHER WARRANTIES AND REMEDIES ARE HEREBY EXPRESSLY EXCLUDED, INCLUDING BUT NOT LIMITED TO ANY IMPLIED WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE, TO THE EXTENT EITHER APPLIES TO A PRODUCT SHALL BE LIMITED IN DURATION TO THE PERIODS OF THE EXPRESSED WARRANTIES GIVEN ABOVE.

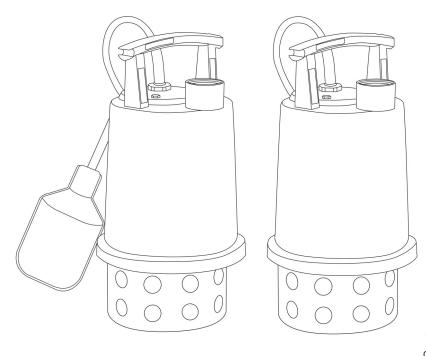
Some states and countries do not allow the exclusion or limitations on how long an implied warranty lasts or the exclusion or limitation of incidental or consequential damages, so the above exclusion or limitations may not apply to you. This warranty gives you specific legal rights, and you may also have other rights which vary from state to state.





# INSTALLATION & OPERATION MANUAL 1/2 HP MAIN DRAIN PUMP

Model: 91875 and 92875





# **Safety Guidelines**

Carefully read, understand and follow all safety instructions in this manual.



This is the safety alert symbol. When you see this symbol, look for one of the following signal words.

**▲ DANGER** 

Indicates a hazardous situation which, if not avoided, will result in death or serious injury.

**A** CAUTION

Indicates a hazardous situation which, if not avoided, could result in death or serious injury.

**A WARNING** 

Indicates a hazardous situation which, if not avoided, could result in minor or moderate injury.

# **Safety Information**

Read these warnings carefully. Know the application and limitations of this pump. Failure to follow these warnings could result in serious bodily injury and/or property damage.

A DANGER

RISK OF ELECTRICAL SHOCK. Disconnect and lockout power supply before removing old pump or installing or servicing this pump.

RISK OF ELECTRICAL SHOCK. This pump is supplied with a grounding conductor and grounding type attachment plug. To reduce the risk of electric shock, be certain that it is connected only to a properly grounded, grounding type receptacle. For added safety, it is highly recommended to connect this pump to a GFCI (Ground Fault Circuit Interrupter) outlet.

**AWARNING** The installation of this pump must be in accordance with the National Electric Code (NEC), Uniform Plumbing Code (UPC), International Plumbing Code (IPC) as well as all applicable local codes and ordinances.

**▲ CAUTION** 

Do not install this pump in any location classified as hazardous by the National Electrical Code, ANSI/NFPA70.

**CAUTION** Do not use this pump to pump flammable or explosive fluids such as gasoline, kerosene, etc. Do not use this pump in flammable or explosive environments. Use only with liquids compatible with pump component materials.

**AWARNING** 

RISK OF ELECTRICAL SHOCK. This pump has not been investigated for use in swimming pool or marine areas.

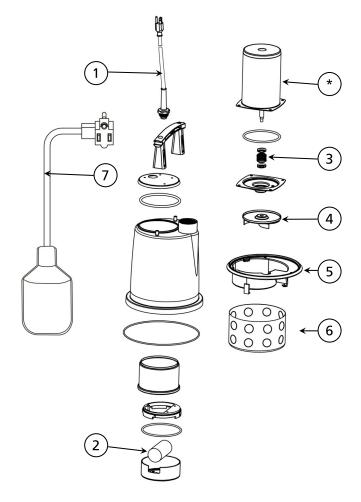
**AWARNING** RISK OF ELECTRICAL SHOCK. <u>DO NOT</u> use the power cord to install or carry the pump. Always use the handle. The cord may pull apart exposing bare wires which could cause a fire or electrical shock. Use the handle supplied with the pump for installing and transporting the pump.

AWARNING

Do not run pump dry. This pump relies on water for cooling. Running the pump dry can cause the pump to overheat and the possibility of burns to anyone that handles the pump. Running the pump dry will void the warranty.

**WARNING** Make certain that the electrical outlet is within the reach of the power supply cord. DO NOT USE AN EXTENSION CORD. Extension cords that are too long or too light do not deliver sufficient voltage to the pump motor. More importantly, they present a safety hazard if the insulation were to become damaged or the connection end were to fall into the water.

## **Replacement Parts**



Ref#	Description	Part #		
1	Power Cord	99755		
2	Capacitor	99769		
3	Mechanical Shaft Seal	99762		
4	Impeller	99764		
5	Volute	99765		
6	Base/Intake Screen	99771		
7	Tethered Float Switch (For model 92875)	92005		

<sup>\*</sup>If motor fails, replace entire pump

## **Troubleshooting**

**▲ DANGER** 

Risk of electric shock. Always disconnect the power supply before attempting to install, service or perform maintenance on the pump.

TROUBLESHOOTING					
PROBLEM	POSSIBLE CAUSES	HOW TO CORRECT			
If the pump does not start or run	Pump is not plugged in, switch or breaker is off	Plug pump in or turn on switch/breaker			
	Check for blown fuses or tripped circuit breakers or tripped GFCI outlets	Replace fuse, reset breaker, reset GF6 outlet			
	Motor thermal protector tripped	Allow pump to cool. Pump will automatically reset			
The pump starts and stops too often (92875 Model)	Backflow of water from discharge hose / pipe	Install or replace check valve (not included)			
	Float switch is defective	Replace float switch			
	Clogged intake screen	Clean screen			
	Clogged discharge hose / pipe	Remove clog			
	Impeller obstructed	Remove obstruction/debris			
If the pump runs but moves little or no water	Frozen discharge hose / pipe	Allow hose / pipe to thaw			
water	Low line voltage	Check voltage & wire size, increase gauge of wire/cord if necessary			
	Worn, damaged or clogged pump parts	Inspect for wear, damage or clog and clean or replace if necessary			
	Discharge head exceeds pump capacity	If pumping height is over 30', the pun will not move water. See performan chart			
Pump does not shut	Float switch is obstructed or stuck	Remove obstruction			
off (92875 Model)	Defective Float Switch	Replace switch			

## **Safety Information (continued)**

**▲** CAUTION

This pump motor is equipped with an automatic resetting thermal protector and may restart unexpectedly.

**AWARNING** 

Do not use this pump for potable/drinking water. Use only in applications for which the pump is designed for.

**ACCORDING** According to the state of California (Prop. 65), this product contains chemicals known to the state of California to cause cancer and birth defects or other reproductive harm.

**▲ WARNING** 

Keep hands clear of suction & discharge openings. To prevent injury, never insert fingers into pump while it is plugged in.

**▲ WARNING** 

Do not handle this pump with wet hands or while standing on wet or damp surfaces or in water.

**▲ NOTICE** 

This pump is not designed as a waterfall, pond or fountain pump. Use of this pump for waterfalls, ponds or fountains will void the

## **Description**

warranty.

The 91875 non-automatic and 92875 automatic main drain submersible pumps are designed to remove water from pools. They can also be placed inside pool drains 8" or larger. The permanent split capacitor motor is oil filled and hermetically sealed for cooler operation. The pump comes equipped with a 3-prong grounding type power cord.

## **Specifications**

Model	91875	92875		
HP	1/2	1/2		
Switch Type	None	Tethered		
Volts	120 volt AC	120 volt AC		
Amps	11.5 Amps	11.5 Amps		
Hz	60 Hz	60 Hz		
Phase	1	1		
Motor Duty	Continuous*	Continuous*		
Circuit Requirements	15 Amp minimum	15 Amp minimum		
Discharge Size	1-1/4" (31,8 mm) FNPT	1-1/4" (31,8 mm) FNPT		
Max. Solids Handling	1/2" (12.7 mm) Spherical	1/2" (12.7 mm) Spherical		
Maximum Liquid Temp.	120°F (49°C)	120°F (49°C)		
Cord Length	25' (7.62m)	25' (7.62m)		
Float Switch	n/a	Wide Angle - 25' Cord		
Minimum drain diameter	8" (20.32 cm)	8" (20.32 cm)		
Pump Construction	Stainless Steel	Stainless Steel		
Impeller Material	Stainless Steel	Stainless Steel		
Motor Shaft	Stainless Steel	Stainless Steel		
Shaft Seal	Mechanical	Mechanical		

<sup>\*</sup>For continuous operation, the water depth must be at least 6"(15cm) to prevent the motor from overheating.

#### Installation

- 1. Install the pump directly into the pool drain or on a hard level surface in the water. If necessary, place bricks or patio blocks under the pump to raise it off the bottom. Do not place the pump directly in mud, sand or silt or on rocky surfaces as these materials can clog or cause damage to the pump.
- 2. Connect a discharge hose to the pump 1-1/4" FPT discharge.
  - a. Option 1 Hose Kit Installation: Connect a Superior Pump sump pump hose kit 99624\* or 99626\* to the pump discharge.
  - b. Option 2 Garden hose installation: Connect a garden hose\* to pump discharge using a Superior Pump 99005 garden hose adapter\*.
  - c. Option 3 Custom Installation: Choose the best size hose\* or pipe\* for your application.

**NOTE**: To keep friction loss as low as possible, do not use a hose that is smaller than 3/4"

\*Hose and adapters sold separately

## 91875 Operation

- 1. Connect the plug into a 120 volt AC grounded outlet. The use of a GFCI is strongly recommended.
- 2. The pump will start pumping in approximately 3-1/2" of water and will drain down to approximately 1" of the surface.
- Do not let the pump run dry. The pump depends on water for cooling and lubrication. Operating the pump without water may cause the motor to overheat or cause damage to internal parts. It may also shorten the life of your pump.
- 4. The pump motor is thermally protected. It is not recommended for pumping liquids over 120° F (49° C). The thermal overload protector will automatically shut down the pump in an overheat/overload situation. The pump will reset itself once the pump cools down. This overload is designed as a safety device and it will fail after repeated use. Normal operation is for fluids between 32° F & 120° F (0° C - 49° C).

# 92875 Operation

- 1. Connect the plug from the pump into the back of the piggy-back plug of the tethered float switch.
- 2. Connect the two combined plugs into a 120 volt AC grounded outlet. The use of a GFCI outlet is strongly recommended.
- The pump will start pumping in approximately 10" of water and will drain down to approximately 3" of water then automatically shut off.
- Do not let the pump run dry. The pump depends on water for cooling and lubrication. Operating the pump without water may cause the motor to overheat or cause damage to internal parts. It may also shorten the life of your pump.
- 5. The pump motor is thermally protected. It is not recommended for pumping liquids over 120° F (49° C). The thermal overload protector will automatically shut down the pump in an overheat/overload situation. The pump will reset itself once the pump cools down. This overload is designed as a safety device and it will fail after repeated use. Normal operation is for fluids between 32° F & 120° F (0° C - 49° C).

#### **Maintenance**

**A DANGER** 

Risk of electric shock. Always disconnect the power supply before attempting to install, service or perform maintenance on the pump.

**AWARNING** All repairs must be made by an authorized service center.

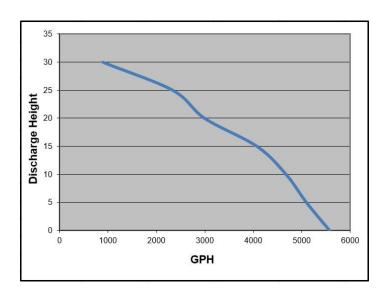
**▲** CAUTION

Allow the pump to cool before servicing.

- 1. The pump motor is hermetically sealed in the housing and does not require any service. Disassembly of the motor housing or modification of the power cord voids the warranty.
- Periodically check the intake screen for obstructions. Clean if necessary.
- Inspect the impeller for signs of wear and obstructions.
- Inspect the power cord for signs of damage or wear. Do not operate the pump if the cord is damaged or worn.

#### **Performances**

Height, pipe diameter, fittings and hose length will reduce the pump output performance. It is recommended to use the same size or larger pipe / hose as the pump discharge for optimum performance. The performances listed below were obtained by using 1-1/4" pipe. The use of a garden hose will reduce the output depending on size and length of hose used. To keep friction loss as low as possible, hose must be 3/4" or larger. Use the shortest length of hose possible for your application.



Model	Discharge Height	0′	5′	10′	15′	20′	25′	30′
91875 92875	Gallons Per Minute	93	85	78	68	50	39	15
	Gallons Per Hour	5580	5100	4680	4080	3000	2340	900