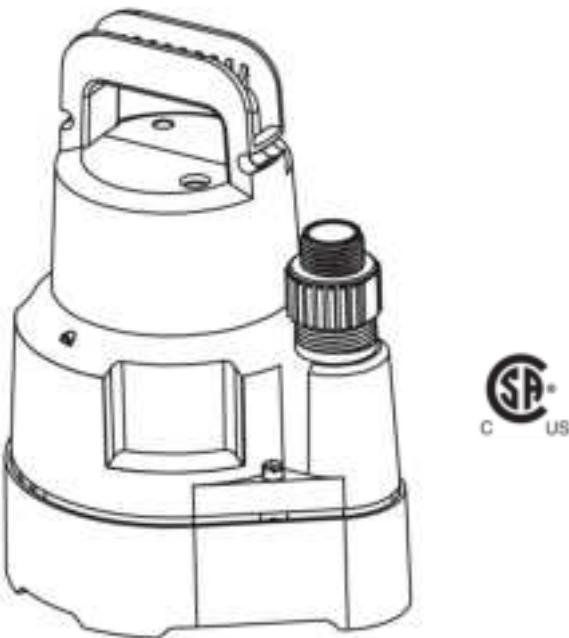


**SUPERIOR
PUMP®**

INSTALLATION & OPERATION MANUAL
1/4 HP UTILITY PUMP

Models:
91006



Safety Guidelines

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

 This is the safety alert symbol. When you see it is sensible to look for one of the following signal words:

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

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

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.

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

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

WARNING The installation of this pump must be in accordance with the National Electrical 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.

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

WARNING RISK OF ELECTRICAL SHOCK. DO NOT use the power cord to haul 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.

WARNING 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.

Safety Information (continued)

- CAUTION** This pump motor is equipped with an automatic resetting thermal protector and may restart unexpectedly.
- WARNING** Do not use this pump for potable/drinking water. Use only in applications for which the pump is designed for.
- WARNING** This pump is not intended to pump water softener discharge (brine) or condensate. Pumping these liquids could cause damage to the pump and will void the warranty.
- WARNING** 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 operating.
- 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 warranty.

Description

This non-automatic submersible utility pump is designed to remove water from, flooded basements, wading pools and stock tanks, etc. The permanent split capacitor motor features an oil-free design. The pump comes equipped with a 3-prong grounding type power cord.

Specifications

Spec	note
HP	1/4
Volt.	120 volt AC
Amps	2.2
Hz	60 Hz
Head	
Power Draw	0.91 amp ^a
Circuit Req. (min.)	5 Amp min. fuse
Shaft Seal Type	“O”-ring, #34-CH seal included
Max. operating head	10 ft. (3 m)
Max. liquid temperature	20°~40°C
Max. “Head” ^b	22 ft. (7 m)
cord length	9 ft.
Impeller Construction	Thermoplastic
Impeller	Thermoplastic
Shaft seal	“O”-ring

^aAt 120 volt, 0.3000 A, 0.1770 ft. head at 1.0 ft. water level at 6.67°F(19°C) to 100°F(38°C) water temperature.

^bUse 1 handle include

Installation

1. Place the pump on a solid, level surface in the water. If necessary, place bricks or cinder blocks under the pump to raise it off the surface. 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 hose or pipe to the pump discharge. Use either the supplied garden hose adapter or other hose/pipe fitting (soil separately). 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 1/2".

Operation

1. Connect the pump to a 120 volt AC grounded outlet. The use of a GFCI is strongly recommended.
2. The pump will start pumping in approximately 1" of water and will drain down to approximately 1 1/2" of the surface.
3. Do not let the pump run dry. The pump depends on water for cooling and lubrication. Operation without water may cause the motor to overheat or cause damage to internal pump parts. It may also shorten the life of your pump.
4. This pump is equipped with an anti-airlock hole. A stream of water will emit from this hole when the pump is over-run. This is a normal feature of this pump. The anti-airlock hole should be cleaned periodically to prevent the pump from becoming air locked.
5. The pump motor is thermally protected. It is not recommended for pump on liquids over 120° F (49° C). The thermal overload protector will automatically shut down the pump in an overheated/overload situation. The pump will reset itself once the pump cools down. The over-load 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).

Airlock

When a pump airlocks, it runs but does not move any water. An airlock will cause the pump to overheat and fail. This pump has an anti-airlock hole in the bottom of the pump housing. If you suspect an airlock, unplug the pump, clean out the anti-airlock hole with a paper clip or piece of wire, and restart the pump.

Maintenance

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

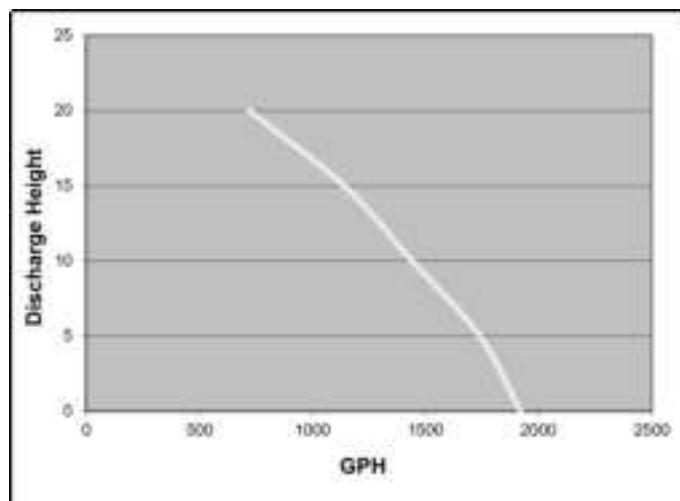
WARNING All repairs must be made by an authorized service center.

CAUTION Allow the pump to cool for 2-3 hours 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.
2. Periodically check the intake for obstructions. Clean if necessary.
3. Inspect the impeller for signs of wear and obstructions.
4. 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 restriction 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" pipe. The use of a garden hose will reduce the output depending on size and length of hose used. To keep friction as low as possible, hose must be 1/2" or larger. Use the shortest length of hose possible for your application.



Model	Discharge Height	0'	5'	10'	15'	20'
		Galons Per Minute	29	24	19	12
91206	Galons Per Hour	1920	1710	1440	1140	720

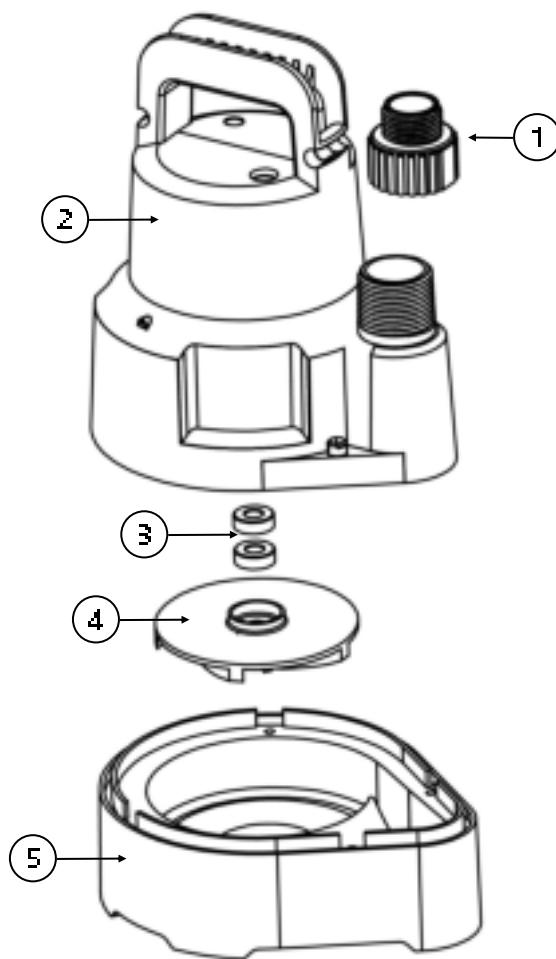
Troubleshooting

DANGER

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

PROBLEM	POSSIBLE CAUSES	HOW TO CORRECT
The pump does not start.	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 GFCI outlets	Replace fuse, reset breaker, reset GFCI outlet
	Motor thermal protector tripped	Allow pump to cool. Pump will automatically reset
The pump runs but moves little or no water	Clogged intake screen	Clean screen
	Clogged discharge hose/pipe	Remove clog
	Impeller obstructed	Remove obstruction/debris
	Frozen discharge hose/pipe	Allow hose/pipe to thaw
	Pump is air locked	Clean out anti-air lock hole with a paper clip or pipe cleaner
	Low line voltage	Check wire size and increase if necessary
	Worn, damaged or clogged bearing seals	Inspect for wear, damage or clog and clean or replace if necessary
	Discharge head exceeds pump capacity	If pumping height is over 23', the pump will not move water. See performance chart

Replacement Parts
91006



Part #	Description	Part #
1	SHT Adapter	990013
2	Motor ^a	9554
3	Shaft Seal	99048
4	Impeller	99076
5	Base	99142

^a Motor fails, read & see info page

For Parts or Assistance, please call 1-800-495-9278

LIMITED WARRANTY- J-TILITY PUMPS.

Superior Pump warrants the products specified in this warranty to be free from defects in material or workmanship for one year from date of purchase. During the one year period, we will repair or replace at our option and expense, any defect in material or workmanship. All of these Superior Pump warranties are subject to the following conditions. Superior Pump's liability is limited to repairing or replacing defective equipment parts or components. Superior Pump has the right to inspect any product before it replaces or repairs it. No part of this warranty applies before and to any equipment under construction or if repaired. This warranty does not apply to Pumps or Piping Systems sold or used outside the United States for commercial purposes. For service or assistance call toll-free 1-800-425-9875.

WARRANTY PERIOD- PRODUCTS.

If within the warranty period, due to the original cost, the product proves to be defective due to materials or manufacturing, the product shall be repaired or replaced at Superior Pump's option, subject to the terms and conditions set forth in the warranty statement. Proof of purchase is required for warranty consideration. If the cost of a suitable replacement part is determined to be greater than the original cost of the product, the warranty period of the product is extended 2 months from the products date of manufacture.

ASSESSMENT OF COSTS.

Superior Pump shall not be responsible or liable for removal, installation, and/or other charges, caused by any customer in removing a pump, temporary access, parts, or components thereof.

PRODUCT IMPROVEMENTS.

Superior Pump reserves the right to change or improve its products or components thereof without obligation to prior users, either generally or specifically, to an individual shipper or user, or implement.

GENERAL TERMS AND CONDITIONS.

This warranty shall not apply to damage due to acts of God, normal wear and tear, or maintenance services and the parts used in such service, kit and service, shipping, handling, or damage beyond the control of Superior Pump. Marshall Supply Co. products which are damaged, broken or lost, have been subjected to negligence, abuse, or carelessness in shipping, storage or due to improper installation, incorrect maintenance or use, or exceed areas of recommended maximum weight listed in the instructions. Warranty will be void if any of the following conditions are found:

1. Product is used for purposes for which it was designed or manufactured.
2. Product is installed in accordance with applicable codes and practices, and good trade practices.
3. Product is caused to fail by abnormal wear, misuse or manipulation.
4. Product is exposed to weather limits to the following ground, gravel, stone, or grass, plastic, mud, or oil, gasoline, chemicals or any other corrosive substance.
5. Product is exposed to freezing (below 32°F).
6. Product is allowed to operate dry (without liquid).

DISCLAIMER.

An individual or entity that purchases or uses a Superior Pump, its representatives, employees or participants do not constitute shareholders, stockholders or partners of the company or a part of the corporation to sell. Sellers or a Superior Pump distributor or supplier or vendor shall be the replacement vendor required by Superior Pump if the product is damaged or lost. NEITHER SELLER NOR SUPERIOR PUMPS WILL BE LIABLE FOR ANY INJURY, LOSS OR DAMAGE, DIRECT, INCIDENTAL, OR CONSEQUENTIAL (INCLUDING, BUT NOT LIMITED TO, PUNITIVE OR CONSEQUENTIAL DAMAGES) FOR LOST PROFITS, LOST SALES, INJURY TO PERSON OR PROPERTY, OR ANY OTHER INDENITIFICATION CONSEQUENT TO, RELATED TO, OR CAUSED BY USE OF 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 overcomes 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.

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