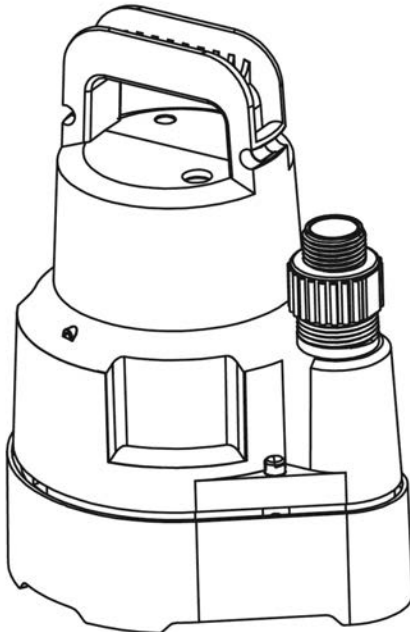




INSTALLATION & OPERATION MANUAL


UTILITY PUMP

Models:
91016
91014



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.

⚠ 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 old pump or installing or servicing this pump.

⚠ DANGER 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.

⚠ WARNING 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.

⚠ 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 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.

⚠ 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 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 warranty.

Description

This non-automatic submersible utility pump is designed to remove water from, flooded basements, window wells 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

Model	91016	91014
HP	1/6	1/4
Volts	120 volt AC	120 volt AC
Amps	2.7	3.8
Hz	60 Hz	60 Hz
Phase	1	1
Motor Duty	Continuous*	Continuous*
Circuit Requirements	15 Amp minimum	15 Amp minimum
Discharge Size	1" MNPT & 3/4" GHT (with included adapter)	
Max. Solids Handling	1/8" (3 mm) Spherical	1/8" (3 mm) Spherical
Maximum Liquid Temperature	120°F (49°C)	120°F (49°C)
Maximum Head**	22' (6,7 m)	28' (8,5 m)
Cord Length	8' (2,4m)	8' (2,4m)
Pump Construction	Thermoplastic	Thermoplastic
Impeller	Thermoplastic	Thermoplastic
Shaft Seal	Lip seal	

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

**Using 1 diameter inch pipe

Installation

1. Place the pump on a solid, level surface in the water. If necessary, place bricks or patio 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 (sold 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 plug into 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 1/4" of the surface.
3. 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 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 operating. 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 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).

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.

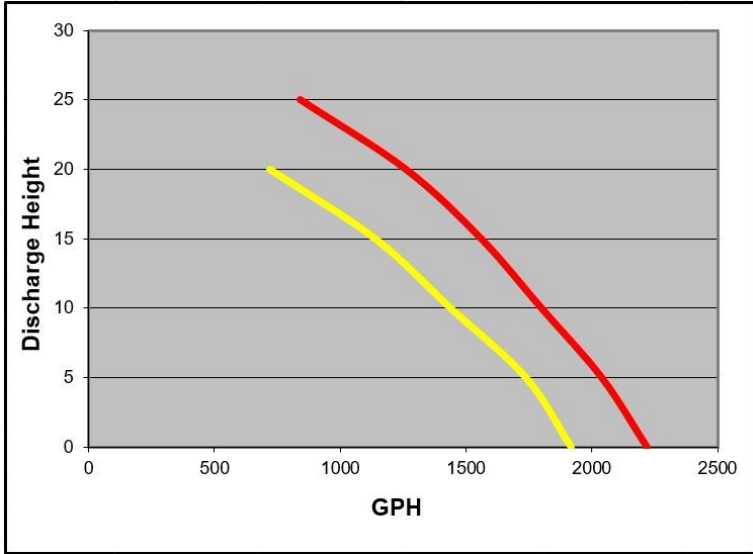
⚠ CAUTION

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'	25'
91014	Gallons Per Minute	37	34	30	26	21	14
91016	Gallons Per Minute	32	29	24	19	12	0

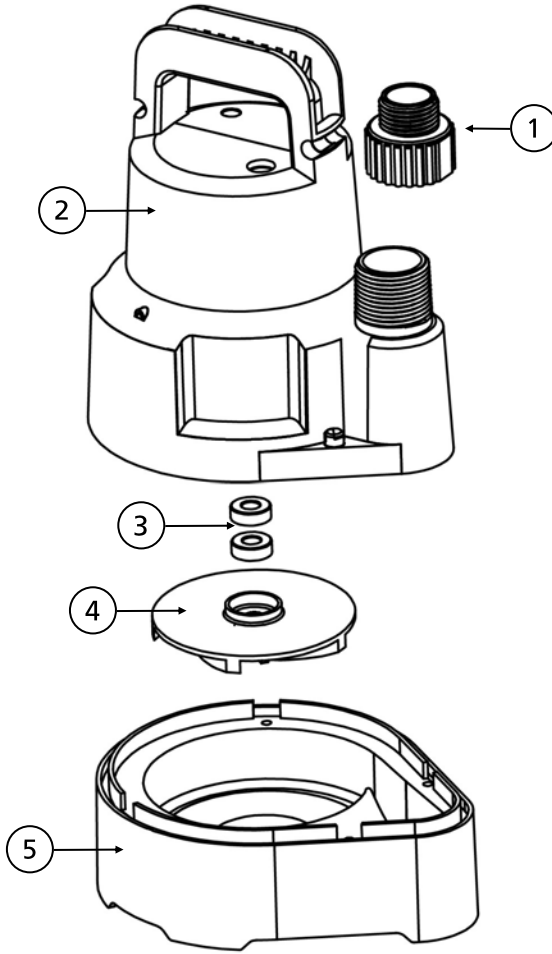
Troubleshooting



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
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 GFCI outlet
	Motor thermal protector tripped	Allow pump to cool. Pump will automatically reset
If 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-airlock hole with a paper clip or pipe cleaner
	Low line voltage	Check wire size and increase 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	91016: If pumping height is over 23', the pump will not move water. See performance chart 91014: If pumping height is over 30', the pump will not move water.	

Replacement Parts
91016 & 91014



Ref#	Description	91016	91014
1	GHT Adapter	99003	99003
2	Motor*	n/a*	n/a*
3	Shaft Seal	99058	99058
4	Impeller	99079	99080
5	Base	99142	99143

*If motor fails, replace entire pump

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

LIMITED WARRANTY - UTILITY PUMPS:

Superior Pump 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, Superior Pump 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 Superior Pump shall have and possess the sole right and option to determine whether to repair or replace defective equipment, parts, or components. Superior Pump 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 Superior Pump'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 Superior Pump'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:

Superior Pump 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:

Superior Pump 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 Superior Pump, nor shall it apply to products which, in the sole judgment of Superior Pump, 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, Superior Pump, 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 Superior Pump's only obligation, and buyer's only remedy, shall be the replacement and/or repair by Superior Pump of the product as described above. NEITHER SELLER NOR SUPERIOR PUMP 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.

