

**Notice to Installer: Instructions must remain with installation.**

FW1156

1109

Supersedes

1008

Product information presented here reflects conditions at time of publication. Consult factory regarding discrepancies or inconsistencies.

*Quality Products Since 1866*

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# INSTALLATION INSTRUCTIONS

These installation instructions are applicable for Models

3SVS	451530	
5SEH	5SE	433020
5SLVS	7SEH	

## PRE INSTALLATION CHECKLIST - ALL INSTALLATIONS

- Inspect your pump.** Occasionally, products are damaged during shipment. If the unit is damaged, contact your dealer before using. **Do Not** remove the test plug in the cover.
- Carefully read the literature** provided to familiarize yourself with specific details regarding installation and use. These materials should be retained for future reference.

 <div style="border: 1px solid black; padding: 5px; display: inline-block;"><b>WARNING</b></div> <b>SEE BELOW FOR LIST OF WARNINGS</b>	<div style="border: 1px solid black; padding: 5px; display: inline-block;"><b>CAUTION</b></div> <b>SEE BELOW FOR LIST OF CAUTIONS</b>
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- To reduce the risk of electric shock, install only a circuit protected by a ground-fault circuit-interrupter (GFCI). All pumps are furnished with provisions for proper grounding to help protect you against the possibility of electrical shock.
- Make certain that the ground fault receptacle is within the reach of the pump's 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. But, more important, they could present a safety hazard if the insulation were to become damaged or the connection ends were to fall into the sump and become wet.
- Make sure the pump electrical supply circuit is equipped with fuses or circuit breakers of proper capacity. A separate branch circuit is recommended, sized according the National Electrical Code for the current shown on the pump name plate.
- TESTING FOR GROUND.** As a safety measure, each electrical outlet should be checked for ground using an Underwriters Laboratory Listed circuit analyzer which will indicate if the power, neutral and ground wires are correctly connected to your outlet. If they are not, call a qualified licensed electrician.
- Installation and checking of electrical circuits and hardware should only be performed by a qualified licensed electrician.
- FOR YOUR PROTECTION, ALWAYS DISCONNECT PUMP FROM ITS POWER SOURCE BEFORE HANDLING.**
- These pumps are supplied with a 3-prong grounded plug to help protect you against the possibility of electrical shock. **DO NOT UNDER ANY CIRCUMSTANCES REMOVE THE GROUND PIN.** The 3-prong plug must be inserted in a mating 3-prong fault interrupter receptacle. If the installation does not have such a receptacle, it must be changed to the proper type, wired, and grounded in accordance with the National Electrical Code and all applicable local codes and ordinances.
- Risk of electric shock. This pump has not been investigated for use in swimming pool or marine areas.
- 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.

- Check to be sure your power source is capable of handling the voltage requirements of the motor, as indicated on the pump name plate.
- Vent hole purpose. It is advisable that all submersible sump pumps be of the bottom intake design to reduce clogging and seal failures. If a check valve is incorporated in the installation, a vent hole (approx. 3/16") must be drilled in the discharge pipe below the check valve and pit cover to purge the bottom intake unit of trapped air. Trapped air is caused by agitation and/or a dry basin. This vent hole should be checked periodically for clogging. Water stream will be visible from this hole during pump run periods.
- These pumps are not designed or intended to be used to handle sewage or effluent.
- This pump has been evaluated for use with **WATER** only.
- Maximum continuous operating water temperature for standard model pumps must not exceed 104°F (40°C).

Note: Pumps with the "cCSAus" mark are tested to UL Standard UL778 & CSA Standard C22.2 No. 108.

**REFER TO WARRANTY ON PAGE 2.**

**DO NOT USE FOR PUMPING OILS, GASOLINE OR ANY PETROLEUM BY-PRODUCTS.**

# LIMITED WARRANTY

This product is warranted for one year from the date of purchase or two years from the date of manufacture, whichever occurs first. Subject to the conditions hereinafter set forth, the manufacturer will repair or replace to the original consumer, any portion of the product which proves defective due to defective materials or workmanship. To obtain warranty service, contact the dealer from whom the product was purchased. The manufacturer retains the sole right and option to determine whether to repair or replace defective equipment, parts or components. Damage due to conditions beyond the control of the manufacturer is not covered by this warranty.

**THIS WARRANTY WILL NOT APPLY:** (a) To defects or malfunctions resulting from failure to properly install, operate or maintain the unit in accordance with printed instructions provided; (b) to failures resulting from abuse, accident or negligence or use of inappropriate chemicals or additives in the water; (c) to normal maintenance services and the parts used in connection with such service; (d) to units which are not installed in accordance with normal applicable local codes, ordinances and good trade practices; and (e) the unit is used for purposes other than for what it was designed and manufactured.

**RETURN OF WARRANTED COMPONENTS:** Any item to be repaired or replaced under this warranty must be returned to the manufacturer at Kendallville, Indiana or

such other place as the manufacturer may designate, freight prepaid.

**THE WARRANTY PROVIDED HEREIN IS IN LIEU OF ALL OTHER EXPRESS WARRANTIES, AND MAY NOT BE EXTENDED OR MODIFIED BY ANYONE. ANY IMPLIED WARRANTIES SHALL BE LIMITED TO THE PERIOD OF THE LIMITED WARRANTY AND THEREAFTER ALL SUCH IMPLIED WARRANTIES ARE DISCLAIMED AND EXCLUDED. THE MANUFACTURER SHALL NOT, UNDER ANY CIRCUMSTANCES, BE LIABLE FOR INCIDENTAL, CONSEQUENTIAL OR SPECIAL DAMAGES, SUCH AS, BUT NOT LIMITED TO DAMAGE TO, OR LOSS OF, OTHER PROPERTY OR EQUIPMENT, LOSS OF PROFITS, INCONVENIENCE, OR OTHER INCIDENTAL OR CONSEQUENTIAL DAMAGES OF ANY TYPE OR NATURE. THE LIABILITY OF THE MANUFACTURER SHALL NOT EXCEED THE PRICE OF THE PRODUCT UPON WHICH SUCH LIABILITY IS BASED.**

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

**WARRANTY VALID IN CANADA AND MEXICO.**

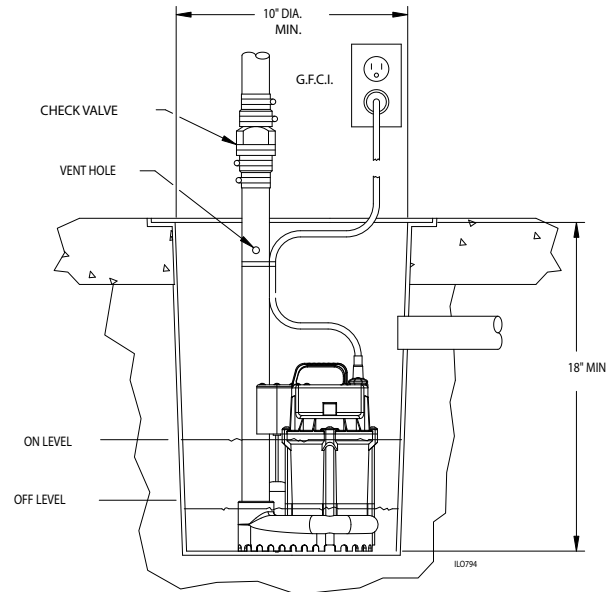
## GENERAL INFORMATION

- These pumps are equipped with a vertical magnetic float switch. The pump will turn on automatically when the water level in the sump reaches approximately the float switch "on" level and automatically turn off when the water is pumped down to the float switch "off" level. See Chart A for details.
- The sump pit must be a minimum of 18" deep and 10" in diameter. The pump requires a minimum diameter of 10" to prevent excessive pump cycling.

## INSTALLATION

- For your safety, turn off the electrical power at the service entrance to avoid any possible electrical shock hazards.
- On a replacement installation, remove the existing pump from the sump by disconnecting the discharge pipe or hose from the old pump. Depending on how your old pump is installed, unscrew clamps and discard old corrugated hose, or unscrew galvanized or plastic pipe from pump discharge. If discharge pipe cannot be removed easily, saw through the pipe about five feet above the pump discharge.
- After removing the old pump, remove sediment, debris, and any standing water from the sump pit.
- Place your pump in the sump and attach the discharge piping. Be sure that the pump is positioned so that the float switch moves freely without touching the wall of the sump or other obstructions. (See Fig. 1).
- Install a full flow check valve to prevent back flow which can cause the pump to cycle too frequently and result in wear and shortened motor life. Drill 3/16" vent hole in piping below the pit cover and check valve. Water stream will be visible from this hole during pump run periods. Reattach discharge piping as required.
- Do not allow the cord to interfere with the float control motion or to drape over the pump motor. With electrician's tape, secure the cord to the discharge pipe. This will provide protection for the cord and make a neat installation.
- Plug in pump and restore electrical power at the service entrance. Fill sump pit with water to check automatic switch operation.
- Install a sump cover. A cover will prevent solid matter from falling

into the sump, prevent odors, and guards against accidental injury.



**Pump On / Off Levels**

**Chart A**

Float Switch	Pump Model			
	3SVS / 451530	5SEH / 5SE / 433020	5SLVS	7SEH
On Level	7"	7"	7"	7"
Off Level	3"	3"	3"	3"

## PERFORMANCE

Your pump will operate effectively pumping clear, storm and drain waters. Although it will usually pass small particles suspended in water - grass, heavy mud, sand or pea gravel can clog the pump and reduce the pump's performance. This can usually be cleaned out by back-flushing on pump side of check valve with a garden hose through the discharge.