

## Basement Watchdog Professional Sewage Pump Instruction Manual & Safety Warnings

### **Specifications**

Model No.	HP	Volts	Discharge Diameter	Max Amps @ 10'		GPH @ 0'	GPH @ 10'	Switch Included
SW-50T	<sup>1</sup> ∕2	115	2″	6.6	2″	6000	4400	Tether Switch

### **Important Safety Instructions and Warnings**

**SAVE THESE INSTRUCTIONS.** This manual contains important SAFETY WARNINGS and OPERATING INSTRUCTIONS. You will need to refer to it before attempting any installation or maintenance.

**ALWAYS** keep these instructions with the unit so that they will be easily accessible. Failure to read and follow these warnings and instructions could result in property damage, serious injury, or death.

A WARNING Risk of electric shock. To reduce this risk, observe the following precautions.

- ALWAYS disconnect the pump from the power source before servicing or making adjustments.
- **NEVER** handle the pump or motor with wet hands or when standing on a wet or damp surface while the pump is plugged into the power source.
- MAKE SURE THERE IS A PROPERLY GROUNDED RECEPTACLE AVAILABLE. This pump is
  wired with a 3-prong grounded plug. To reduce the risk of electric shock, be certain
  that it is only connected to a properly grounded, 3-prong receptacle. If you have a
  2-prong receptacle, have a licensed electrician replace it with a 3-prong receptacle
  according to local codes and ordinances.
- NEVER bypass grounding wires or remove the ground prong from the plug.
- **DO NOT** use an extension cord. The electrical outlet should be within the length of the pump's power cord, and at least 4 feet above the floor level to minimize potential hazards from flood conditions.
- **D0** protect the electrical cord from sharp objects, hot surfaces, oil, and chemicals. Avoid kinking the cord.
- MAKE SURE the supply circuit has a dedicated fuse or circuit breaker rated to handle the power requirements noted on the nameplate of the pump.
- NEVER install the pump in locations classified as hazardous in accordance with the National Electrical Code, ANSI/NFPA 70.
- **DO NOT** remove the power supply cord and strain relief or connect the pump directly to the conduit.
- ALWAYS install the pump in accordance with the National Electric Code and all applicable local codes and ordinances. All wiring should be performed by a licensed electrician.



### ▲ CAUTION To r

## To reduce the risk of hazards that can cause injury or property damage, observe the following precautions.

- **DO NOT** use the power cord or strain relief to carry the pump. Use the pump handle.
- DO NOT operate the pump or control unit if it has been damaged in any way.
- D0 drill an air bleed hole in the discharge pipe when a check valve is used. Drill the hole at an upward angle from the bottom of the pit to avoid splashing water outside the pit. If a hole is not drilled above the pump, an air lock may prevent the pump from operating. The best location for the hole is about 3" above the discharge outlet on the pump. The hole <u>must</u> be drilled below the check valve. Drill a 3/16" (4.76mm) hole in the discharge pipe for the SW Series pumps.
- **DO NOT** use in continuous duty applications such as fountains or ponds. This pump is rated for intermittent use only.
- DO NOT flush foreign objects down the toilet including but not limited to paper towels, napkins, wipes, baby wipes, diapers, feminine products (sanitary napkins or tampons), prophylactics, contraceptives or dental floss.
- **DO NOT** disassemble the pump or control unit. When service is required, contact Glentronics technical support at 800-991-0466, option 3. Return the product to the manufacturer for any repairs at the following address:

#### Glentronics, Inc. 645 Heathrow Drive, Lincolnshire, IL 60069

#### NOTICES

- Sewage pumps will not provide protection during a power outage. **DO NOT** use plumbing fixtures that empty into the sewage pit until the power has been restored and you have confirmed the pump is receiving power and functioning.
- After the initial installation, be sure to check the operation by filling the pit with water and observing the pump operation through several full cycles.
- In instances where the discharge line is exposed to freezing temperatures, the pipe must be sloped downward so any remaining water will drain out. Failure to do so will prevent water from exiting the pit and damage the pump if the line freezes.

### **Installation Instructions**

#### **Prior to Installation**

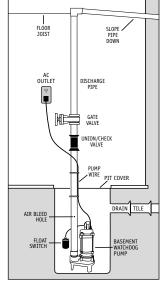
- 1. Visually inspect your pump. Products may be damaged during shipping. If the product has been damaged, contact your place of purchase or Glentronics, Inc. before installation.
- 2. Thoroughly read the instructions provided to learn specific details regarding installation and use. This manual should be retained for future reference.

#### Installing the Pump

A WARNING

This installation must be in accordance with the National Electric Code and all applicable local codes and ordinances.

- Use a pit that conforms to all local codes and is large enough to accommodate the pump and float switch. Larger pits are preferred, since they will extend the discharge cycle and reduce the number of times the pump turns on.
- 2. Clean the pit of all debris.
- 3. The pump should not be set directly onto a clay, earthen, or sand base.
- 4. The pump should be level.
- Install discharge plumbing according to local, regional and state codes. Rigid PVC pipe is recommended.
- 6. To avoid debris pouring onto the float, it should be positioned on the side of the discharge pipe opposite the drain tile. (See diagram). The tethered float switch must be moving freely at all times. Make sure the float switch does not come into contact with other pumps, wires, pipe or any other object that may be in the pit. The float switch must not come into contact



with the pit floor or wall. If the float switch does not move freely the pump will not activate.

- 7. The size of the pump outlet is 2". Match the size of the discharge pipe to the size of the outlet on the pump to maintain the optimum pumping capacity.
- 8. An in-line check valve rated for sewage applications is recommended to prevent backflow. Note: When using a check valve, an air bleed hole of 3/16" (4.76mm) needs to be drilled in the discharge pipe. The best location is about 3" above the top of the discharge outlet. The hole <u>must</u> be drilled below the check valve. A small stream of water will escape through this air bleed hole when the pump is running, so the hole should be drilled on an angle toward the bottom of the pit.
- 9. Install a gate valve or ball valve as required by any codes.
- 10. Secure the power cord to the discharge pipe with wire ties or clamps to prevent interference with the float assembly.
- 11. A cover is required in all sewage pump installations with gas-tight seals to contain gases and odors. A vent pipe should be added in any sewage installation. Always follow local, regional and state codes when installing a sewage pump.
- 12. In instances where the discharge line is exposed to freezing temperatures, the pipe must be positioned in a downward slope so any remaining water will drain away. Failure to do this will prevent water from exiting the pit and damage the pump if the line freezes.

### **Connecting the Pump**

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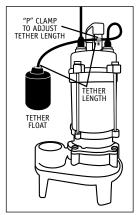
Plug the pump directly into a properly grounded, 3-prong receptacle. For a neater installation, secure the power cord to the discharge pipe with wire ties or hose clamps. Keep any cords separated from each other on opposite sides of the pipe.

#### **Completing the Installation**

- After the initial installation, be sure to check the pump operation by filling the pit with water and observing the pump through several full cycles. The tethered float switch must be moving freely at all times. If the float switch does not move freely the pump will not activate. Be sure to check the pump is turning on and off at the intended levels. Note: The pump should have a "normal pumping" sound. Any abnormal sound, vibration, or lack of output from the discharge pipe is the signal of a problem. Stop the pump and refer to the troubleshooting guide.
- Replace the pit cover making sure not to pinch or crimp the pump wire with the cover. The pit cover either has a 'hole punch' that will allow the cord to be passed through or one can be drilled.

### **Product Operation**

The tether float switch contains a single large float. Water will lift the float switch to activate the pump. As the pump evacuates the water from the pit the float switch will drop and turn off the pump. To adjust the float switch, loosen the screw on the "P" type clamp holding the float switch wire. Adjust the wire to the desired length and then tighten the screw. **DO NOT** shorten the tether length to less than 4". After any adjustment of the float switch be sure to check the pump operation by filling the pit with water and observing the pump through several full cycles. The tethered float switch must be moving freely at all times. If the float switch does not move freely the pump will not activate.



### **Maintenance Check List**

Maintenance should be performed 1-2 times per year.

- 1. Remove all debris from the bottom of the pit.
- 2. Remove all debris floating in the water.
- 3. Remove all debris from the float switch.
- 4. Remove all debris around the air bleed hole.
- 5. Fill the pit with water. Make sure pump turns on at the intended level.
- 6. Make sure the tether float switch is moving freely.
- 7. While the pump is running, make sure pump is evacuating water at a good pace.
- 8. While the pump is running, make sure a stream of water is escaping from the air bleed hole near the bottom of the pump and the air bleed hole in the PVC pipe. If not, clear the hole of any deposits or debris.

Visit our website www.basementwatchdog.com for more information about the Basement Watchdog pumps and battery backup sump pump products.

### **Limited Warranty**

By opening this package and using this GLENTRONICS, INC. product, you are agreeing to be bound by the terms of the GLENTRONICS, INC. limited warranty ("warranty") as set out below. Do not use your product until you have read the terms of the warranty. If you do not agree to the terms of the warranty, do not use the product and return it within the return period stated on your purchase receipt from the retail store or authorized distributor where you purchased it for a refund.

To the extent permitted by law, this warranty and the remedies set forth are exclusive and in lieu of all other warranties, remedies and conditions, whether oral, written, statutory, express or implied. GLENTRONICS, INC. disclaims all statutory and implied warranties, including without limitation, warranties of merchantability and fitness for a particular purpose and warranties against hidden or latent defects, to the extent permitted by law. GLENTRONICS, INC. will not be liable for any incidental, special or consequential damages for breach of any express or implied warranties on this product. In so far as such warranties cannot be disclaimed, GLENTRONICS, INC. limits the duration and remedies of such warranties to the duration of this express warranty and, AT GLENTRONICS, INC.'s option, the repair or replacement services described below. Some states (countries and provinces) do not allow limitations on how long an implied warranty (or condition) may last, so the limitation described above may not apply to you.

Any and all causes of action arising from, filed as a result of or in reference to, this warranty or the products described under this warranty shall be governed by and construed under the laws of the State of Illinois. Any cause of action arising from, filed as a result of or in reference to, this warranty or the products described under this warranty shall be filed only in the Circuit Court of the 18th Judicial District, Lake County, Waukegan, Illinois, or in the Northern District of Illinois if filed in Federal Court. The maximum liability for any product described in this warranty shall be the cost of product replacement only.

If any term is held to be illegal or unenforceable, the legality or enforceability of the remaining terms shall not be affected or impaired.

#### What is Covered by this Warranty?

GLENTRONICS, INC. warrants to the end purchaser that its pumps, switch and control unit products are free from defective materials and workmanship for the periods indicated below: All parts and labor (excluding installation) for a period of:

• 3 years from the date of purchase, when used intermittently as a sewage pump

The defective product must be returned directly to the factory, postage prepaid with the original bill of sale or receipt to the address listed below. GLENTRONICS, INC., at its option, will either repair or replace the product and return it postage prepaid.

#### What is NOT Covered by this Warranty?

This warranty does not cover the cost or value of damaged property, including expressly any property that has been affected by water overflow, seepage or flooding. If GLENTRONICS, INC. determines that a product is deemed defective under this warranty agreement, it will repair or replace the PRODUCT ONLY. GLENTRONICS, INC. will not cover the cost to reinstall the product, nor will GLENTRONICS, INC. pay the cost of having a plumber or contractor repair or replace the product.

GLENTRONICS, INC. will not repair or replace a product that was installed incorrectly. A product shall be considered "installed incorrectly" when it deviates in any way from the instructions described in this manual.

This warranty does not cover product problems resulting from handling liquids hotter than 104 degrees Fahrenheit, handling inflammable liquids, solvents, strong chemicals or severe abrasive solutions; user abuse; misuse, neglect, improper maintenance, commercial or industrial use; improper connection or installation, damages caused by lightning strikes; excessive surges in AC line voltage; water damage to the controller; other acts of nature, or failure to operate in accordance with the enclosed written instructions.

#### How to Obtain Warranty Service

Within thirty (30) days of the product's defective performance, the unit must be shipped, freight prepaid, or delivered to GLENTRONICS, INC. to provide the services described hereunder in either its original carton and inserts, or a similar package affording an equal degree of protection. Products not received by GLENTRONICS, INC. at the address indicated below within thirty (30) days of the product's defective performance will not be considered for warranty service. Products received after three (3) years from the date of installation, fall outside of the timeframe for warranty service and will not be eligible for warranty service. In product must be returned to GLENTRONICS, INC. for inspection in order to be considered for warranty service. If the product is not returned to GLENTRONICS, INC. for inspection in order to be considered for warranty service. If the product is not returned to GLENTRONICS, INC., this warranty service. Service by any person, plumber, contractor or business other than GLENTRONICS, INC., this warranty shall no longer be valid. Prior to defective operation, the unit must not have been previously altered, repaired or serviced by anyone other than GLENTRONICS, INC., or its agent; the serial number on the unit must not have been altered or removed; the unit must not have been subject to accident, misuse, abuse or operated contrary to the instructions contained in the accompany-ing manual. The dealer's dated bill of sale, or installer's invoice must be retained as evidence of the date of purchase and to establish warranty eligibility.

Where are Products Sent for Warranty Service? Glentronics, Inc., 645 Heathrow Drive, Lincolnshire, IL 60069

How Can I Obtain More Information? By calling 800-991-0466

	Pump is not plugged in	Plug pump in properly (see instructions)			
	Water is not high enough to activate the pump	Make sure float switch is positioned properly			
	Open circuit	Check circuit breaker or fuse			
	Poor power source	Check circuit line wires and cable*			
The pump will not start or run	Low voltage	Check line wires and source voltage*			
	Bad power cable	Replace with new cable*			
	Locked impeller	Remove strainer and clear obstruction			
	Defective float switch	Replace float switch with new float switch			
	Defective pump	Replace pump with new pump			
	Locked impeller	Remove strainer and clear obstruction			
Thermal protector tripping or	Incorrect power supply	Check power supply source and voltage			
not functioning	Overburdened due to heavy sand content in the water	Use water filter or replace with a higher wattage pump			
	Pump running continuously with no water present	Check sensor rod			
Denomination of a large state	Float switch mounted too low	Adjust float switch level			
Pump starts and stops too frequently	Water flowing back from pipe	Install or replace check valve			
nequency	Malfunctioning sensor	Replace sensor			
	Clogged or frozen discharge	Clear blockage or thaw frozen line			
	Blocked intake strainer	Clear debris from intake strainer			
Pump will not shut off	Check valve installed with no air bleed hole in pipe or pump	Drill a bleed hole in the discharge pipe, or clean debris from the existing hole in the pipe or pump			
	Check valve is stuck or installed upside down	Reverse or replace check valve. Make sure the check valve is installed with the flow arrow pointing up and out of the pit.			
	Float switch is stuck in the on position	Clear debris from the float switch			
	Check valve on secondary pump will not close and water re-circulates within the system	Replace the check valve on the secondary pump			
	Worn impeller	Replace impeller & adjust spacing between impeller and cover			
	Partially blocked impeller	Remove strainer and clear obstruction			
	Clogged or frozen discharge	Clear blockage or thaw frozen line			
Insufficient or no water	Broken or leaking pipe	Repair piping			
volume	Low power voltage	Check power voltage, wires and cable condition			
	Check valve installed with no air bleed hole in pipe or pump	Drill a bleed hole in the discharge pipe, or clean debris from the existing hole in the pipe or pump			
	Check valve is stuck or installed upside down	Reverse or replace the check valve. Be sure check valve is installed with flow arrow pointing up and out of the pit			
	Pump is air locked	Remove debris from the air bleed hole			
Abnormal sound or vibration	Check valve on secondary pump will not close and water re-circulates within the system	Replace the check valve on the secondary pump			
	Blocked intake screen	Clear debris from intake screen			
	Broken impeller	Replace impeller with new one			

# **Troubleshooting** (Always unplug the pump from the controller before performing any maintenance)

\*Consult a licensed electrician.

If the above solutions do not solve the problem, contact Glentronics customer service 800-991-0466, option 3.