

ABBREVIATED INSTALLATION INSTRUCTIONS

BATTERY BACKUP SUMP PUMP MODEL DH-900

- Protects against power outages and main pump failures.
- Fully Automatic!
- Uniquely placed above water level.
- Maximum Reliability!
- Easy installation.

Please read all the instructions before attempting to install the DH-900.

The pumping capacity of the DH-900 may vary depending on your piping configuration, battery age, and capacity.



Specifications:		Physical Size:
Pump Motor:	12 VDC, 9 Amps	Pump Length: 9 1/2" Width: 6" Height: 6"
Battery Charger:	1.0 AH @ 12 VDC, 0.4 Amp Load	Battery case L: 17", W: 9-1/2", H: 11"
Charger Service:	120 VAC, 60 Hz, GFCI Outlet	Pump weight: (without battery): 10 Lb
Float Switch:	Tether type with mounting Clamps	Total shipping weight: 22 Lbs.
Water Alarm:	Integrated, operated by float	1-1/4" PVC Connection
Battery Requirements:	12 Volt Marine Deep Cycle, Sealed Lead Acid, AGM, or Gel: Size 27	
BATTERY NOT INCLUDED		
<i>NOTE: Extra battery case available as an add-on kit to double pumping time; not pumping rate</i>		
Flow Rates:		Pumping Times:
At 5 feet:	1300 Gallons Per Hour	Using Marine Deep Cycle Battery/30 second cycles
At 9 feet:	900 Gallons Per Hour	At 1 minute intervals 12 Hours
<i>NOTE: Do not exceed 13 feet total lift; pumping capacity will be affected</i>		At 5 minute intervals 48 Hours
		At 15 minute intervals 96 Hours
Included Parts:		
Motorized Submersible Pump	Tether Float with Clamp	
Battery Case with Junction Box Attached	Installation Instructions; safety specifications	
Plug-In Battery Charger	10 Foot Discharge Hose, 2 Hose Clamps	
Stainless Steel Mounting Bracket		
PVC Tee, Check Valve, Adapters, Elbow, Cable Ties, (3) Clamps		
Additional Parts & Supplies Needed:		Tools Needed:
Check Valve for Main Sump Pump	Hand saw and/or PVC cutting tool	
PVC Primer and Cement	Phillips and slotted screwdrivers	
Thread Sealing Tape or Dope	Utility knife, tape measure, large adjustable pliers	
12 Volt Marine Battery (See Above)		

STEP 1: Mount DH-900 To Bracket

Place battery into plastic battery case. Measure the distance from the basement floor down to the high water level in the sump, determined by the water level at the moment the main pump starts. Then select the proper holes on the 2 brackets and connect using the screws, lock washers, and hex nuts, and tighten securely. This should set the pump to hang just above the water. Push one end of flexible discharge hose onto barbed outlet fitting on base of pump and secure with stainless steel hose clamp. Place mounting bracket on floor with pump hanging into the sump as shown and put battery box on mounting bracket to hold securely in place.

STEP 2: Disconnect Primary Pump

Unplug primary pump and drain water from discharge pipe.

STEP 3: Install Discharge

Indoor Discharge:

Tee Assembly: The PVC parts are assembled in the bag in their finished position **without cement**. Prime and cement the check valve in place as shown to the right. Use Teflon tape on the pipe threads and screw together tightly. Using the discharge hose as a guide determine the position for the finished Tee fitting to be inserted into the main pump discharge pipe.

The DH-900 Tee Fitting must be mounted up near the ceiling.

Mark the position on the main discharge pipe so the DH-900 discharge hose will run upward and into the main discharge pipe without any tight bends or kinks. Cut PVC discharge pipe from the primary pump at the location you marked using a hand saw or PVC cutter. Remove a 2" section of the pipe for insertion of the finished Tee fitting. Prime, glue, and insert into the desired location and allow time to dry.

SPECIAL DISCHARGE OPTIONS:

Direct Discharge to Exterior: The DH-900 may also be installed using its own separate discharge to the exterior, if desired. This may be necessary when excessive main discharge piping is present. Use the discharge hose on the pump, as in a standard installation and then connect the upper end of it into a new PVC pipe that you purchase locally to run out to the exterior. In this case, a PVC female adapter to receive the black hose barb adapter may be required to adapt from hose to pipe

Emergency Sink Discharge: Your installation may be an emergency and you may need to install this pump with the discharge hose going into a nearby laundry tub or a drain. It is important that the laundry tub drain be in working order and not in a shut-off condition or backing up from the sewer. This will work for a temporary, quick installation. Later this should be changed to a permanent installation.

STEP 4: Float Switch (2 choices available)

Option 1: Pump Mounting

The float is factory mounted to the correct length. Do not attempt to make the cord longer. Should you desire the float in a different position, it can be rotated in either direction.

Option 2: Discharge Pipe Mounting

Using the same plastic tether float holder with the smaller hose clamp, secure hose clamp to the primary pump discharge pipe in the proper position above the primary pump. Insert the cord inside the clamp and adjust the length of the cord by pulling or pushing cord through the clamp. When correct position with proper swing is set, tighten clamp securely around cord.

START UP

Connect **Red (+) Pos** wires from charger **and** junction box on the side of the battery box and connect securely to positive (+) battery terminal. Connect **Black (-) Neg** wires from charger **and** junction box and connect securely to negative (-) battery terminal (*use wing nuts on battery terminals for this*). After battery is connected, plug charger into a GFCI protected wall outlet.

DON'T FORGET TO PLUG THE PRIMARY PUMP BACK IN WHEN YOU ARE FINISHED!

WATER ALARM

This alarm is activated at the same time that DH-900 activates, to let you know there is a high water situation. It will sound each time DH-900 runs and turn off at the end of each cycle. Remember, not all sump pump failures are the result of power failures; this alarm may be your only way of knowing something is going on with your sump pump.

MAINTENANCE PROCEDURES

Every 2-3 months, lift the DH-900 float by hand and confirm pump operation and water removal. Confirm that the float is allowed to move freely and hits no obstacles. Check battery age and charger status lights. This charger is automatic; no adjustments or maintenance are required.