

# Hydropump Model DH900-M & DH900-MB Installation Instructions

Please read all the instructions before attempting to install this PUMP. The pumping capacity of this pump may vary depending on your piping configuration, battery age, and capacity. Remove all packaging and materials from shipping box.

## Specifications

Pump Motor:	12 Volt DC, 9 Amps	
Battery Charger:	1.0 AH @ 12 VDC, 0.4 Amp Load	
Charger Service:	120 VAC, 60 Hz, GFCI Outlet	
Float Switch:	Magnetic Resistance	
Water Alarm:	Integrated Battery operated water alarm	
Battery Requirements:	12 Volt Marine Deep Cycle, Sealed Lead Acid, AGM, or Gel: Size 27	
Battery:	DH900-M - Not Included	DH900-MB - Included

<b>Flow Rates:</b> Gallons / Hour	5 Foot Lift >> 1,300 GPH	9 Foot Lift >> 900 GPH	13ft. Max. Lift
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**DH900-M is a Level Maintainer which pumps 2” of water on each cycle.**


### How long will the DH900-M Maintainer Pump operate?

If your sump pump operates every:	Your sump then receives “x” Gallons per hour (GPH):	The Maintainer will run for:
1-minute	600 GPH	12-Hours
2-minutes	300 GPH	1-Day
4-minutes	150 GPH	2-Days
6-minutes	100 GPH	3-Days
8-minutes	75 GPH	4-Days
10-minutes	60 GPH	5-Days

Notes: 1. Calculate the above times during a wet, rainy period of time.

2. Figures based on a standard 18” diameter sump.

*Example: Primary sump pump cycles every 4 minutes during really rainy weather. This means you are receiving about 150 GPH of inflow and the Maintainer will operate for 2 full days without electrical power from the house circuit. (Subject to battery age, condition, and type; head pressure, distance to exterior, etc.)*

	<b>Included Parts:</b>
	Motorized submersible pump with float switch attached
	Battery case with junction box and water alarm attached
	Plug-In battery charger with cables
	Stainless steel mounting brackets; 1 on pump; 1 loose
	PVC tee, check valve, 1 male adapter, elbow, 1 barbed adapter
	4 Foot discharge hose with 2 hose clamps
	3 Cable ties, (2) 10 Amp glass fuses (1 in yellow holder, 1 extra)
	Installation instructions
	4 Oz. can clear PVC cement
	<b>Additional Parts needed:</b>
	12 Volt marine battery (See separate sheet)
	Check valve for primary sump pump

## ⚠ WARNING

### ELECTRICAL SHOCK HAZARD

Disconnect power before installing or servicing this product. A qualified service person must install and service this product according to applicable electrical and plumbing codes.

## ⚠ WARNING

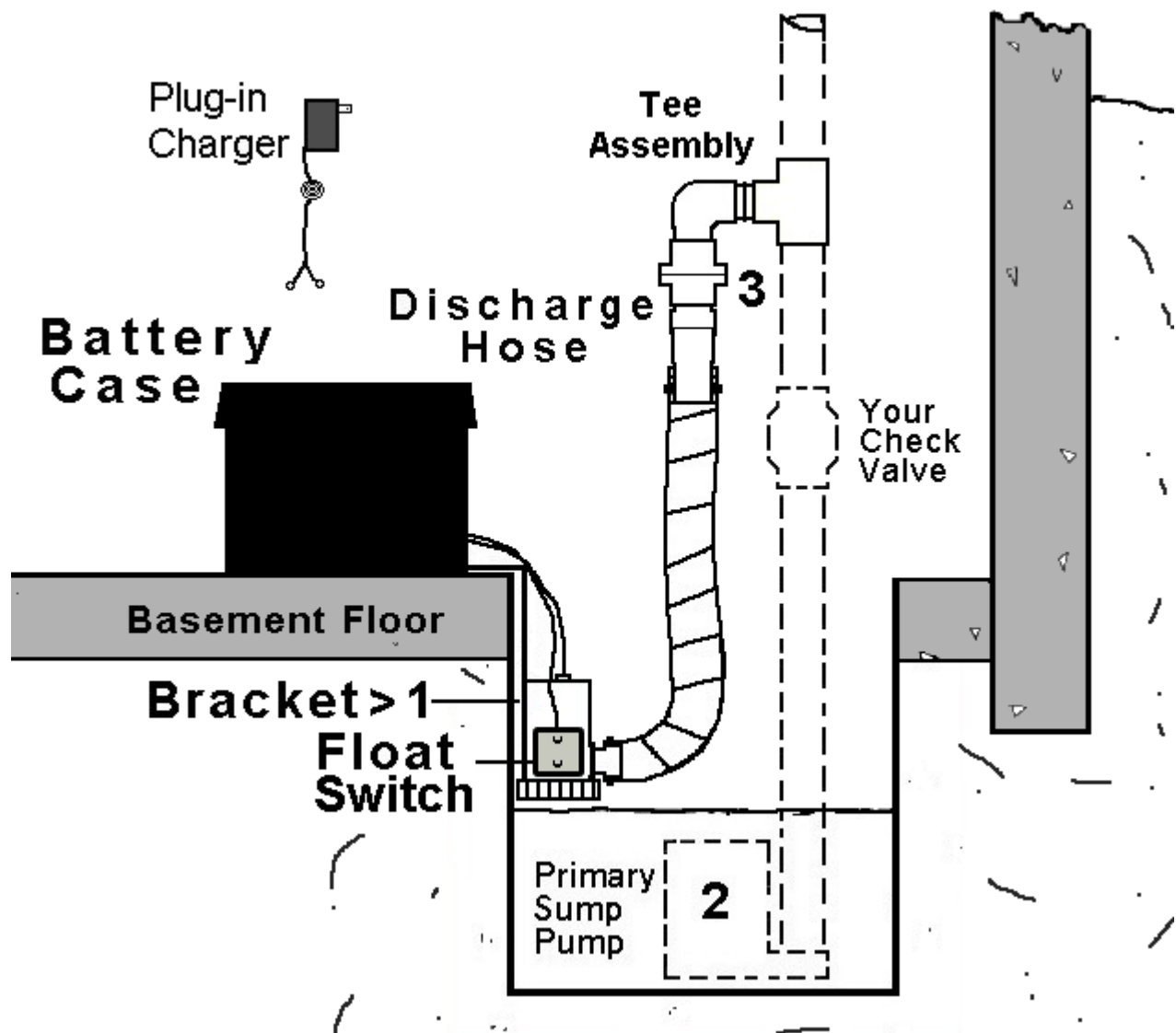
### EXPLOSION OR FIRE HAZARD

Do not use this product with flammable liquids. Do not install in hazardous locations as defined by National Electrical Code, ANSI/NFPA 70.

Failure to follow these precautions could result in serious injury or death. Replace product immediately if switch cable becomes damaged or severed. Keep these instructions with warranty after installation. This product must be installed in accordance with National Electric Code, ANSI/NFPA 70 so as to prevent moisture from entering or accumulating within boxes, conduit bodies, fittings, float housing, or cable.

## Step by Step Installation

Refer to installation drawing throughout installation.



Pump comes with a vent hole at discharge outlet to prevent an air lock.

### Step #1 Mount PUMP to bracket:

**Mount** the pump on the long, "L" shaped floor bracket using the screws on the pump bracket, and connect by removing and re-using the lock washers and hex nuts that are on the screws; tighten securely. Set the pump to hang just above the high water mark (the level at which the primary pump normally turns on).

**Push** one end of the flexible discharge hose onto barbed outlet fitting on base of pump and secure with stainless steel hose clamp. Place floor bracket on floor with pump hanging into the sump as shown above and put battery box on mounting bracket. Put pump and battery case into their final position on the floor and then put the battery into the case.

**Do not connect any wires yet.**

## **Step #2 Disconnect primary pump:**

Unplug primary pump and drain water from discharge pipe. A high quality, fully functioning check valve **MUST** be present above the main pump and below the PUMP discharge Tee connection, as shown above. Without it, PUMP will send water back down through your main sump pump and possibly flood your basement.

## **Step # 3 Install Discharge:**

**Tee Assembly:** The tee assembly is supplied in a loose fitted assembly to make it easy to understand. It must be PVC cemented together and paste applied to the threaded joint.

**Mark** the position on the main discharge pipe so the PUMP discharge hose will run upward and into the main sump pump discharge pipe without any tight bends or kinks. Cut PVC primary pump discharge pipe at the location you marked, using a hand saw or PVC cutter. Remove a 2" section of the pipe for insertion of the Tee fitting. Make sure fittings are in correct position, then remove and add cement to one pipe end only and insert fully, turning it to the correct position. Then add cement to the other pipe end, and insert fully. **Tip:** A pencil mark on the edge of the tee where it meets the pipe helps assure proper alignment and depth of insertion.

**NOTE:** Connection between the tee and the elbow is threaded and can be turned to align pipes where necessary. The arrow on the check valve is direction of water flow.

**Tip:** *Hose may be cut to fit, using sharp utility knife.*



### **1. Start Up:**

Connect **Red (+) Positive** wires from charger and junction box on the side of the battery box securely to positive (+) battery terminal. Connect **Black (-) Negative** wires from charger and junction box 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.

**Note:** If connecting a second battery using our "Dual Battery Case", all the **Red Wires** go to the **Positive (+) Battery Terminals** and all the **Black Wires** go to the **Negative (-) Battery Terminals**. Connect the proper-colored wire to each terminal of the first battery and "jump" to the matching terminals of the second battery using the wires that come with the Dual Battery Case. This keeps the batteries in "parallel" and allows the charger to maintain both batteries. Be sure to keep the cable ends from touching each other while connected to the battery, or they will short circuit and cause harm to the system or even cause injury.

**Battery charging:** Refer to charger instructions for more information about operation and the light indicators.

**\*\*\*\*\* Don't forget to plug the primary pump back in when you are finished!! \*\*\*\*\***

### **2. Water Alarm:**

This alarm is activated at the same time that PUMP activates, to let you know there is a high water situation. It will sound each time PUMP runs and will 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. Inside the junction box on the side of the large battery case, there is a wiring connection that can be disconnected if **quieter operation** is desired. Remove the four screws from the small junction box cover, pry it open, and remove the thin, alarm wire from terminal block to silence alarm.

### **3. Maintenance Procedures:**

**Every 2-3 months**, check battery age and charger status lights. This charger is automatic; no adjustments or maintenance are required. Follow battery manufacturer's recommendations and procedures for maintenance of each battery. Do not mix different types of batteries when using two of them. It is best to make a note of the date each time you test the pump and check the battery.

To test the pump:

1. Fill sump above the top circle on the face of the float switch located on the side of the pump.
2. Place two fingers at the same time, one on each of the circles, to turn on the pump. Remove to turn it off. (There is no electrical current on these circles, they respond to the moisture in your fingers).

### **4. Troubleshooting:**

Pump is running but little or no water is being removed from pit.

- **Jammed impeller:** Make sure impeller is spinning freely & not blocked by debris.
- **Clogged discharge:** clear obstruction and restart.

- Pump may be **air-locked**. Clear vent hole on side of pump next to discharge exit near base of pump.
- **Excessive discharge** length or configuration can produce a pressure drop; accept the lower flow or change the layout, direction, length, etc.
- **Battery may need charging** or replacing. A new battery often needs 24 - 36 hours of charging. If it is more than 3 years old, it may need replacing.

Pump will not turn on or off properly.

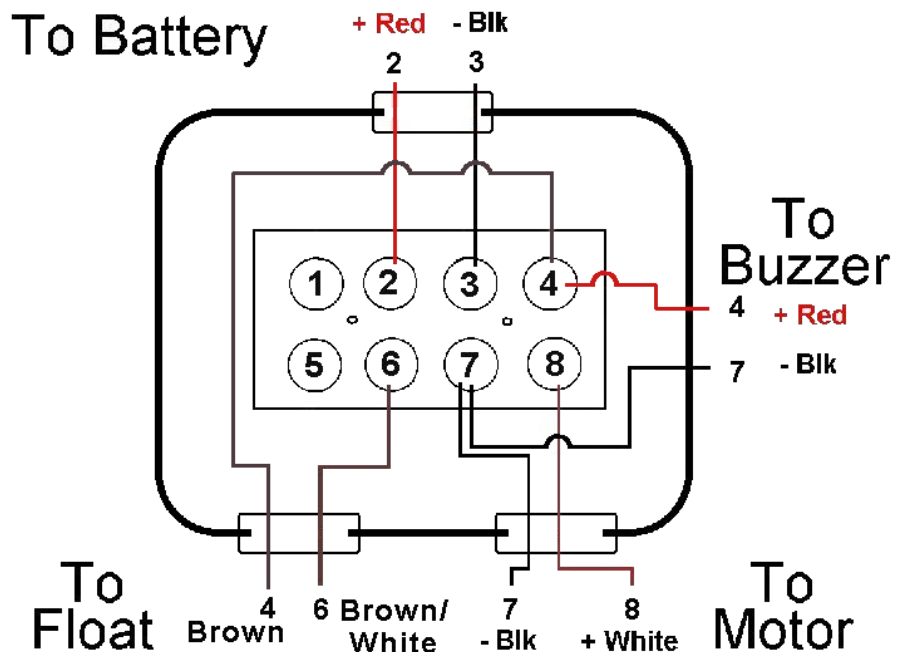
- **Battery terminals** may be connected improperly: correct and tighten securely. Red to Positive; Black to Negative. Pump won't run at all.

- **Check battery connections** and all wires to be sure all are secure. Check battery condition.
- **Check glass-tube fuse inside yellow fuse holder.** Replace if necessary, with appropriate matching fuse. DH900-M uses 10 Amp glass tube type fuse.

## Wiring Diagram

This is inside the junction box located on the side of the large battery box.

**Keep these instructions near the pump for future reference.**



## Return Policy

**Before installation**, if you determine that this product is not suitable for your application, call The Company or your dealer for return information. **After installation**, if you choose to return it, call The Company for return approval; there may be parts that cannot be credited. The Company is not responsible for any cost incurred with installation, removal, or pump repairs. Proper packaging of the returned product is the customer's responsibility and goods damaged while in transit as a result of improper packaging will not be considered for credit. Unused product may be returned within 30 days for full refund; from 31 to 90 days after purchase a 15% restocking fee will be charged; no returns accepted after 90 days.

## 30 Day Customer Satisfaction Guarantee and Two Year Limited Warranty

Within 30 days of purchase, if you are not completely satisfied with your new PUMP, we will refund your money, in full, excluding shipping charges. Pump must be returned unused and in re-salable condition. Please contact the dealer where you purchased your pump to obtain refund. If purchased directly from Base Products Corporation (The Company), you must call us at 800 554 1426 to receive authorization to process return or to receive Technical Assistance. Please give your name, address, phone number, date of purchase, and address of the installation. The Company warrants this Battery Powered Backup Sump Pump against defects in material and workmanship for a period of **TWO YEARS** from the date of purchase. In the event of any defect in the pump unit within the warranty period, The Company will, at its option, replace or recondition the product without charge providing the product is returned, prepaid to our office in Buffalo, New York. This shall constitute the exclusive remedy for any alleged defect. The Company shall not be responsible for any incidental, indirect, contingent, or consequential damages, including, without limitation, damages or other costs resulting from labor charges, delays, loss of use, revenue or profit, vandalism, negligence, fouling caused by foreign material, damage from peculiar water conditions, chemicals, electrical problems, or other circumstances over which The Company has no control. The Company makes no other warranties, express or implied, except as provided in this limited warranty. This warranty becomes void by any misapplication, misuse, abuse, or improper installation of the product. This warranty gives you specific legal rights and you may also have other rights which may vary from state to state. Warranty is applicable in the USA and Canada, only.