

EASY INSTALLATION INSTRUCTIONS FOR BASEMENTSAYER BP3 BATTERY POWERED BACKUP SUMP PUMP – Basementsaver Backup Sump Pumps Outlet



Congratulations On Purchasing Your Basementsaver BP3 Battery Backup Sump Pump! You Should Soon Have Your Pump Smoothly And Efficiently Protecting Your Basement. Just Follow These Easy Installation Instructions And It Is Difficult To Go Wrong! Please Note – It Really Is IMPORTANT That You Take The Time To Read All The Following Instructions Before Attempting The Installation Of Your Pump!

***If You Don't You'll Probably Experience Unnecessary Stress And May Void Your Warranty!!
If you have questions or concerns just contact **Basementsaver** – we're here to help you.***

Basementsaver BP3 Low-Maintenance Battery Powered Emergency Basement Sump Pump System For Commercial Sump Pits With Very High Pumping Rate:

Basementsaver BP3 Battery Powered Pump



**3,500 gal/hr average
Ultra-High Pump Rate**



**Basementsaver BP3 Emergency
Battery Powered Pump Removes
3,500 gal/hr Average From Your Sump
Assuming A 9ft Lift To Discharge**

**This 'Out-Of-Sump' Backup Pump Is
Especially Useful For Sump Pits That
Have Space Limitation Preventing Use
Of A Submerged Backup Pump.**

Please Place These Instructions Back Into The Plastic Bag They Came In And Use The Enclosed Beaded Tie Wrap To Hang The Bag On Or Near Your Basementsaver BP3 Battery Powered Backup Sump Pump For Future Reference!

Basementsaver BP3 Battery Backup Sump Pump Easy Installation Instructions

BEFORE you begin installing your pump, **Please Read ALL Instructions.** The pumping capacity of Your BP3 pump may vary depending upon your specific piping configuration, battery age, and battery capacity.

 <p>WARNING</p>	<p>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.</p>	 <p>WARNING</p>	<p>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.</p>
<p>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.</p>			

If You Have Questions:

If you have any questions visit www.basementsaver.com or e-mail service@basementsaver.com with your question or call 1-866-374-3977 for help.



Specifications:

Pump Motor:	1/3 HP, 120 VAC, 4.6 Amps
Battery Charger:	5 AH @12 VDC
Charger Service:	120 VAC, 60 HZ, GFCI Outlet
Float switch:	Vertical style with clamp
Water Alarm:	Integrated
Battery requirements:	(2) 12 Volt Marine Deep Cycle or sealed lead acid, Size 27
Battery not included:	Ask for highest quality in size 27, best warranty)
Fuses:	Inverter, 30 AMP @ 32 Volts

Physical Size:

Length: 12", Width: 6", Height: 12"
Pump Weight (without battery): 10 lbs.
Total shipping weight: 43 lbs.
1-1/2" Socket PVC Connection

Flow Rates:

At 5 feet	4,000 Gallons per hour
At 9 feet	3,500 Gallons per hour

** Do not exceed 15 feet total lift; pumping capacity will be affected**

Pumping Times:

Using Marine Deep Cycle Battery at 30 second pumping cycles	
Continuous	18 Hours
At 5 minute intervals	36 Hours
At 15 minute intervals	72 Hours

Included Parts:

Motorized pump unit with stainless steel mounting bracket	One-way foot valve with screen
(1) Battery case with Inverter and Charger Attached	Wye connector with screen and adapters
(1) Battery case with pump packed inside	Flexible discharge hose (4 feet)
Vertical switch to activate pump (pre-wired)	Rigid PVC pipe: (3) pieces, 12" long each
Hardware: (4) Cable ties, (3) Hose clamps, (1) 90° PVC elbow	PVC coupling
Installation instructions: pump, motor, and safety specifications	

Additional Parts & Supplies Needed:

- Check valve for primary pump (existing?)
- PVC Primer and cement (small can of each)
- (2) Deep cycle Marine, Lead acid, AGM, or Gel batteries
- Contact us for batteries: we sell AGM and Gel batteries.

Tools Needed:

- Hand saw and/or PVC cutting tool
- Phillips and slotted screwdrivers
- Utility knife, tape measure
- Large adjustable pliers

Next, Please Record Your Pump Information Below:

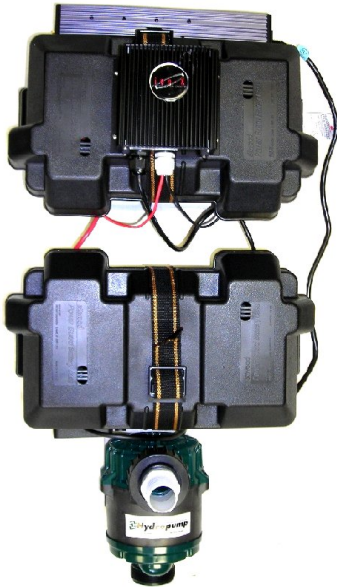
Model No. BP3 Serial No: _____

Installation Date: _____

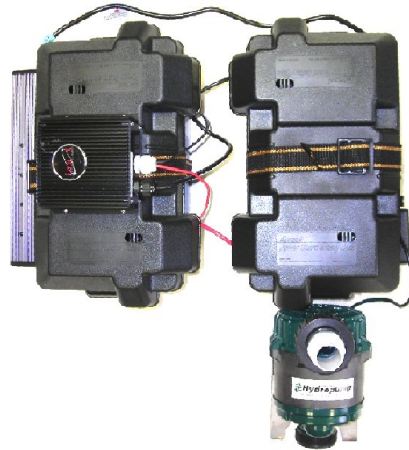
Basementsaver BP3 Battery Powered Backup Sump Pump Step By Step Installation Instructions

Note: The **Basementsaver BP3 Backup Pump** Is Designed NOT To Be Submersed. The pump sits above your basement sump pit and draws water out through a submerged suction pipe when activated by a rising water level. This pump is therefore especially useful when Your sump pit space is limited:

Pump Layout 1



Pump Layout 2



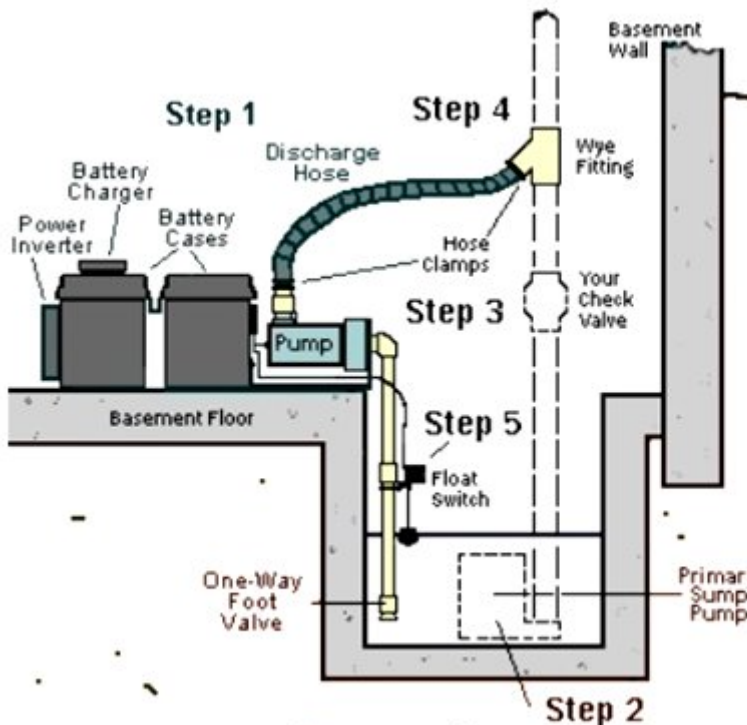
Use the adjacent Pump Layout Schematics to help guide you to the optimum pump layout for your application:

In either layout, the cases are side by side so that all the wires fit and match up correctly with the batteries that you will place inside.

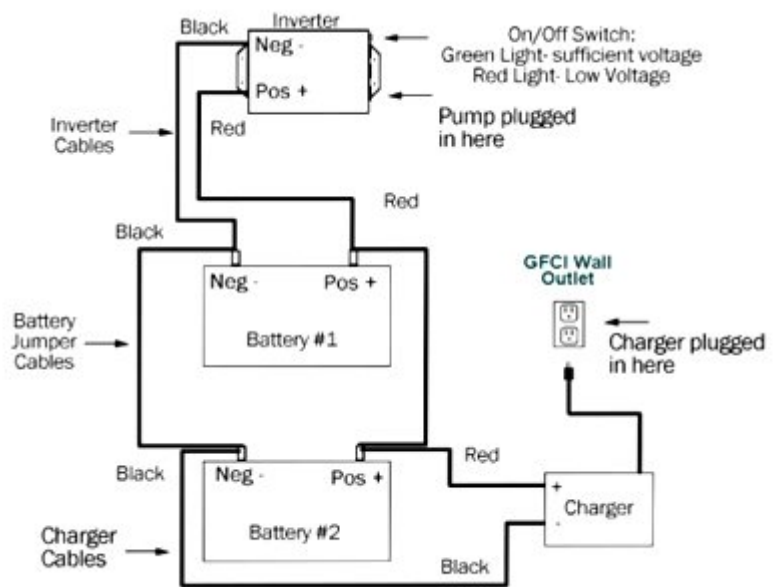
The pump bracket should be attached to the battery case without the inverter, and may be attached to either the long side or the short side of the case.

Holes are provided in both places to allow you to select either layout configuration.

Installation Diagram



Wiring Schematic



Step 1 - Place The BP3 Pump Unit On The Floor Beside Your Basement Sump

Remove all packaging and materials and hang all wires over the side and out of the battery boxes.

Attach The Mounting Bracket - There are positioning holes on one long side as well as one short side of the battery box that does NOT hold the inverter. These are for attaching the Stainless Steel mounting bracket. Use the two Stainless Steel screws and nuts provided to attach the bracket to the battery case so that the bracket sits on the floor and can be positioned next to the sump.

Position both battery cases and the pump in final position on the floor close to the sump pit, as illustrated for *Pump Layout 1* or *Pump Layout 2* above.

Insert the batteries (NOT Included – You Must Obtain Locally) to keep them stable. Be sure to place the batteries in the cases so that the terminals on each battery line up with each other, positive across from positive, negative across from negative (See Wiring Diagram Above). **Do Not Connect Any Wires** to the terminals yet!

Step 2 - Disconnect Your Primary Sump Pump:

Unplug your primary (ac) sump pump and it's discharge pipe. **A high quality, fully functioning check valve MUST be present above the main pump and below the BP3 Backup Pump discharge Y connection.** Without it, the BP3 Backup Pump will not operate properly, and it may recycle water down through your main pump and back into your sump. A **removable type check valve** is recommended, in order to service the main pump in the future without disconnecting the backup pump.

Step 3 - Install The Backup Pump Suction Pipe:

Prime and cement the foot valve to one end of the short, straight section of rigid PVC pipe supplied with the BP3 pump unit, and allow time to dry. Don't cement any more sections until you verify all positioning of pipes.

Measure the vertical distance from the pump inlet fitting to approximately 2 - 4 inches from the bottom of your sump pit. Use the PVC coupling supplied to connect a second piece of PVC pipe to the first section with the foot valve attached. In most cases these two pieces of PVC will be sufficient to reach nearly to the bottom of your sump.

Connect the 90° elbow, as shown above, and use the third piece of PVC pipe for the horizontal section that goes into the pump (cut to fit if necessary) and push it into the socket fitting on the pump suction inlet.

The inlet and outlet fittings on the pump have a union fitting attached. These are hand turned onto the pump to keep them together during shipping. While gluing the PVC parts to these union fittings, it is best to separate the two halves of each union and do the gluing away from the pump so as not to get cement inside the pump or its fittings. You must keep the union half that is removed during this process together with its insert section while gluing. Otherwise, you will not be able to slide the nut over the rest of the pipe.

Once all sections are correctly positioned; disassemble, prime, and cement all joints.

After all the cement has dried, re-assemble the unions to the pump. Make sure the foot valve is not resting in mud or against the bottom of the sump; set it 2 - 4 inches above the bottom so it won't pick up

debris, mud, stones, etc. This is a good time to clean out your sump pit and remove any foreign objects or debris. SUCTION AND DISCHARGE LINE MUST BE FULL OF WATER AT ALL TIMES IN ORDER TO OPERATE CORRECTLY.

Step 4 - Install The Discharge Pipe:

Find the two PVC barbed adapters and the two smaller stainless steel hose clamps in the parts bag. Cement one of these into the water outlet fitting on the top of the BP3 Backup Pump. Re-connect the union to the pump and tighten by hand. Slip one hose clamp over the end of the flexible discharge hose and push hose end onto this barbed fitting on the BP3 pump unit. Slide the metal hose clamp down over the end of the hose where it is pushed over the barbed fitting. Tighten the metal clamp around hose and barbed adapter securely.



Use the hose as a guide to determine the position on the main pump discharge pipe for the Y fitting to be inserted. Mark the position so the backup pump discharge hose will run approximately on a 45° angle from the BP3 pump, as shown. If your main pump discharge pipe is 1-1/4" PVC, cement the 1-1/4" x 1-1/2" bushing adapters into the ends of the Y fitting; otherwise, pull them out and set them aside.

Carefully cut the main pump discharge pipe as squarely as possible with a hand saw or PVC cutter, removing a 3" section of the pipe for insertion of the Y fitting. Prime and cement the Y fitting to the upper section of the main pump discharge, and immediately rotate it so the offset opening faces toward the backup pump - before the cement hardens.

Prime and cement the lower section of the main pump discharge into the bottom of the Y fitting. Carefully cut the flexible discharge hose with a sharp utility knife or saw to fit from the backup pump to the barbed adapter on the Y fitting, as shown. - Allow sufficient hose for insertion of the barbed fitting!

Place the second hose clamp over the top end of the discharge hose and push the hose end onto the barbed adapter that is inserted into the Y fitting. Slide the hose clamp up so it is around the hose end and the barbed fitting and tighten securely. The large union fittings can then be tightened onto the pump after all PVC parts are set and the hose is lined up, etc.

Step 5 – Install The Backup Pump Float Switch:

Attach the vertical float switch to the side of the suction pipe using the largest hose clamp provided. The float should be positioned in its fully down position just above the "normal primary pump" level. Slide the float up the rod by hand to simulate a normal response to high water and confirm the location of the "high" level.

The float will need to rise to the top of the rod to turn the pump on and all the way down to the bottom of the rod to turn the pump off. If necessary, you may move the rubber stopper on the bottom of the rod up to a new position for an earlier shut-off. Make sure the pump will come on before the float reaches the top of the pit so water never reaches the floor. It should turn off before the water drops down below the foot valve so air does not enter the system and break the suction prime. If the pump needs to re-prime itself the next time it runs, it can take several minutes.

After following the start-up procedures below, you may have to make some minor adjustments to the float to assure proper operation. It is often necessary to place the float in a position where it is partially lifted during a regular cycle of the main pump, as long as it does not raise it enough to turn the pump on unless there is a failure of the main pump. Adjust floats on both pumps, if necessary. SUCTION AND DISCHARGE LINE MUST BE FULL OF WATER AT ALL TIMES IN ORDER TO OPERATE.

Basementsaver BP3 Battery Powered Backup Sump Pump Start-Up And Operation Instructions

1. Start Up Procedure:

Connect all Red (+) Pos wires from the inverter, charger and pump motor together to positive (+) battery terminal. Connect all Black (-) Neg wires from the inverter, charger and pump motor together to negative (-) battery terminal using wing nuts on terminals. (See Wiring Schematic Above). Tighten securely. Plug charger into a GFCI protected wall outlet using the supplied extension cord.

Now plug your primary sump pump back into the wall outlet!

Important: Fill the sump with water from a hose if needed to test for proper installation. Lift the primary sump pump float by hand and operate the pump for approximately 10 seconds. Do this 2 or 3 times to sufficiently prime the backup pump with sump water, and to purge out any trapped air.

Verify that all joints are sealed, then unplug the primary pump and refill the sump pit with water. You may simulate the rising water by lifting the float by hand, but don't empty the pit and lose the prime. Confirm that the location and position of the backup pump float is correct and moves freely. Raise the backup pump float to reach the desired "high level" which will begin the pumping before the water reaches the top of the sump pit. Confirm that the float shuts the pump off when returned to the "low level" before the water surface is below the bottom of the foot valve. Repair any leaks now during this process.

Battery charging: A new battery, or one that's discharged, may take 24-48 hours to fully charge. The charger green indicator light means the charger is receiving power from the wall outlet. The red light will glow to indicate the battery is fully charged.

Note: It is normal for the red light to go on and off. It is also normal for the charger to feel warm to the touch and hum slightly.

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

2. Water Alarm:

The water alarm buzzer is activated at the same time that the backup pump activates, to warn you of the high water situation. It will sound each time the backup pump runs, and turn off at the end of each cycle. There is a wiring connection inside the junction box on the side of the large battery case, which can be disconnected to prevent the alarm sounding. Remove the four screws from the small junction box and remove the thin, red alarm wire from terminal block to silence the alarm.

3. Maintenance Procedures:

Every 3 months lift the backup pump float by hand and confirm pump operation and water removal. Confirm that the float is allowed to move freely and hits no obstacles. Check the battery age and charger status lights. The green light must be on to show that the charger is powered from the wall outlet. The red light should be on when charging is complete and off when charging is required. This is an automatic charger; no adjustments or maintenance are required.

4. Troubleshooting The Pump, The Inverter, TheCharger:

4.1. Troubleshooting ThePump:

The Backup Pump Turns On For A Few Seconds And Then Shuts Off

The BP3 motor is provided with 3 safety features, a priming sensor, overheating sensor, and a rotor blockage sensor. The pump will shut off within 3 seconds should any one of these conditions exist. The most common reason for a safety shut-off is the lack of priming. To reset the pump, first add water to the pump piping and then turn the inverter switch off and back on.

The Backup Pump Is Running But No Water Is Being Removed From Your Sump

- **Pump is not primed** - Allow the backup pump to run for 1 - 5 minutes to remove trapped air and restore its own prime. If necessary, open the hose clamp on the flexible discharge hose where it is connected to the Y fitting, and pull the hose off the barbed fitting. Pour water into the hose until full. This restores a lost prime. Reconnect and start the backup pump again.

- **Clogged suction or discharge pipe** - Clear obstruction and restart.

The Backup Pump Is Removing Low Volumes Of Water

- **Suction or discharge piping may be partially clogged which restricts water flow** - Clear the obstruction.

- **Excessive discharge pipe length and/or configuration can produce a large pressure drop** - Accept the lower flow or change the piping layout, direction, length, etc. (See separate discharge connection kit)

- **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 is likely to need replacing.

- **Check all PVC joints and confirm that they are cemented and leak-tight** - Air leaks reduce pumping capacity.

The Backup Pump Will Not Turn On Or Off Properly.

- **Float must be fully down for off and fully up for on** - Adjust the float by hand to each position required to test the pump. Re-position the clamp on the suction pipe, or the rubber stopper on the bottom of the float rod, if necessary, to assure proper operation.

- **Battery terminals may be connected improperly** - Correct and tighten securely.

NOTE: SUCTION AND DISCHARGE LINE MUST BE FULL OF WATER AT ALL TIMES IN ORDER TO OPERATE. THIS IS NOT A SELF-PRIMING PUMP. THE FOOT VALVE AND CONNECTION TO THE MAIN PUMP DISCHARGE IS DESIGNED TO KEEP THE LINE FULL OF WATER. DO NOT ALLOW HYDROPUMP TO PUMP DOWN DRY. SET THE FLOAT SWITCH TO TURN THE PUMP OFF WHILE THE FOOT VALVE IS STILL SUBMERGED.

4.2. The Inverter:

Low Voltage Condition

When input voltage decreases to 10.5V (12V models), the inverter will sound an alarm. This alarm indicates low battery voltage. At this time, discontinue use of the Hydropump until after the battery is charged. If the pump remains in use, and the input voltage decreases further to 10V (12V models), the output will automatically cut off to prevent battery exhaustion.

Dispersion Of Heat

The inverter will get warm during extensive operation. This indicates that the unit is functioning properly. The amount of heat generated will vary with the power draw of the Hydropump. In order for proper heat dissipation to occur, ensure that air is allowed to circulate freely around the unit. A fan will come on in cases were the unit is operating at maximum power output and/or for an extended period of time.

Inverter Specifications

DC input voltage: 12V

Continuous output power: 1,200w

Maximum surge power: 2,500w

No load current draw: < 1w

Output frequency: 50/60 Hz
AC output voltage: 120V

Using The Inverter For Other Uses

The inverter is supplied with two (2) spare 120 V AC outlets. Other equipment such as lights may be plugged in an emergency situation. Note: Additional items will drain the batteries' capacity and possibly exceed the rating of the inverter.

4.3. The Battery Charger:

The Ion-X Adaptive Battery Charger Should Only Be Used On The Appropriate Output Voltage Systems. Improper Use Could Cause The Battery To Explode, Resulting In Fire, Personal Injury, And Damage To The Charger.

DANGER – Extreme caution should be taken when working in the vicinity of all types of batteries. Lead acid and AGM batteries emit flammable gases during normal operation and while being charged. Open flames, matches, smoking materials, or other means of ignition should not be used near the batteries. The AC power source to the charger must be turned off when working on or disconnecting the charger to avoid sparks. The battery case cover or a temporary cover of non-conductive material should be placed over the battery when working near it to prevent sparks from tools being dropped on it.

DANGER – Electricity can kill – The AC power supply to the charger should always include an equipment grounding conductor. Never use a two-blade to three-blade plug adaptor or an extension cord with a male plug having only two blades. Always use an AC receptacle with a three-blade outlet and an extension cord with a three-blade male plug. Always unplug or turn off the AC power supply at the main distribution panel when working on the battery charger. Avoid working on or connecting power to the charger with wet hands or under wet conditions.

Battery Types And Sizes - ion-X Battery Chargers are designed to work with lead acid (flooded) and absorbent glass mat (AGM) batteries. The ion-X Chargers are also designed to operate with batteries of any ampere-hour rating. Charge time will vary depending on the ampere-hour rating of the battery and DC output rating of the charger. Chargers for gel cell batteries are also available; please contact Base Products for more details.

Battery Charger Installation - Your standard ion-X battery charger is waterproof, but whenever possible, it is best to place the charger in a dry location, not in open areas exposed to rain, or in locations that are subject to wash down or water-spray.

Operating The Battery Charger - The ion-X Battery Charger generates a moderate amount of heat while charging. The temperature of the unit may rise up to 35°C/ 95°F above the charger environment temperature. Please exercise caution when handling the charger while in use.

Charger Status Indicator - Once installation is complete, the user may monitor the charger's LED indicator light to ensure proper charger operation. The ion-X Battery Charger will accurately display the charge status of the battery ONLY when plugged into an AC source. Refer to table below.

LED Color	Charge Status
Solid Green	100%
Flashing Green	80%-100%
Flashing Orange	50%-80%
Flashing Red	Less than 50%

Battery Charger Maintenance

The ion-X Battery Charger is a self-contained unit that requires no maintenance under normal operating conditions. If a fuse fails, the cause of the failure must be corrected before replacing it and continuing the use of the charger. To ensure proper charger operation, the DC battery charger cable connections at the battery terminals must be periodically inspected for corrosion. Consult your battery manual for cleaning and maintenance instructions.

Battery Charger Troubleshooting

Lost AC Power - Check for open AC line fuse or circuit breaker. Check for wiring or other causes for fuse failure or circuit breaker tripping.

Lost DC Output To Battery - Check for poor battery connections: check the DC output battery cable connections at the battery and at the charger's DC output terminal strip. Check for an open DC fuse, faulty wiring or other causes of fuse failure

Internal Failure In The Charger - Check for open AC line fuse or circuit breaker. Check for wiring or other causes for fuse failure or circuit breaker tripping

Lost AC Power Supply - Obtain service from a qualified service provider.

AC Power Supply To The Charger, But LED Does Not Light - Check for poor battery connections. Power surge may have tripped the internal AC circuit device. Consult the manufacturer.

An inline fuse is provided on each positive (red) DC power cable, to protect the charger from inadvertent reversed polarity. In the event that your DC power cable fuse blows and requires replacement, refer to the Specifications on Page 1 of your Hydropump Installation Instructions for the appropriate fuse rating to use with your ion-X Battery Charger.

Basementsaver BP3 Backup Pump 30 Day Customer Satisfaction Guarantee

*Within 30 days of purchase, if you are not completely satisfied with your **Basementsaver Battery Powered Backup Sump Pump**, The Company will refund your money, in full, excluding shipping charges.*

*Please Call **1-866-374-3977** to process return or to receive Technical Assistance. Please give your name, address, phone number, date of purchase, and model number.*

Basementsaver BP3 Backup Pump 1 Year Limited Manufacturers Warranty

The manufacturer warrants this **Basementsaver Battery Powered Backup Sump Pump** against *defects* in material and workmanship for a period of 1 Year from the date of the shipment.

In the event of any defect in the pump unit within the warranty period, The manufacturer will, at its option, replace or recondition the product without charge providing the product is returned, prepaid to our offices in Buffalo, New York. This shall constitute the exclusive remedy for any alleged defect. The manufacturer 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 or other circumstances over which the manufacturer has no control. The manufacturer 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 Applicable in the USA and Canada, Only.*

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