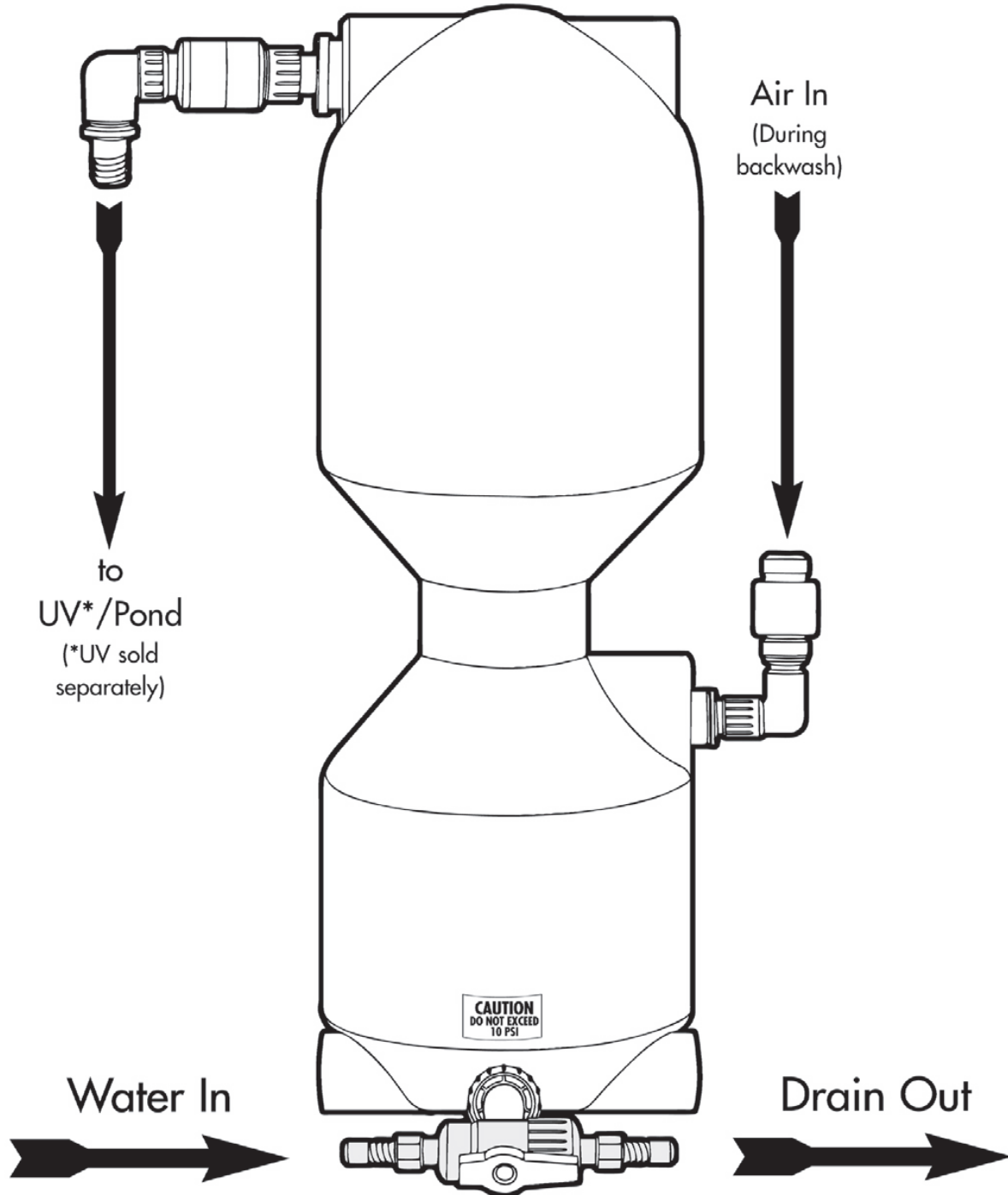


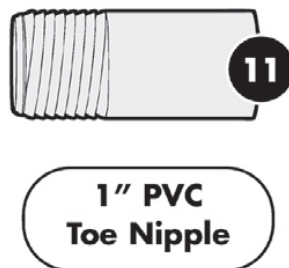
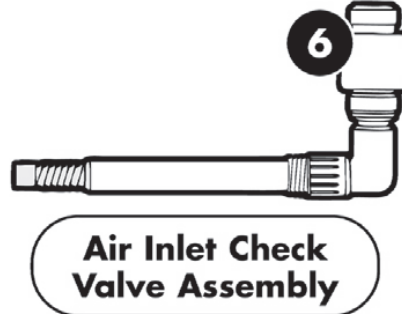
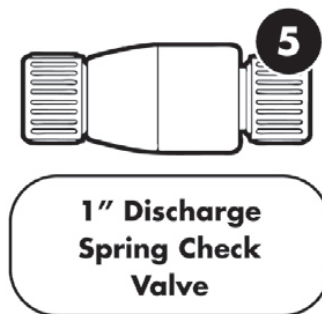
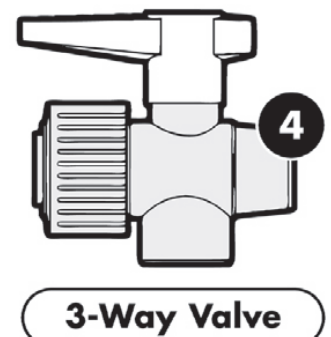
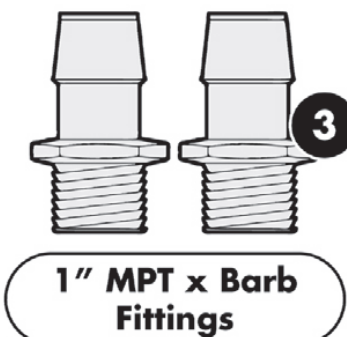
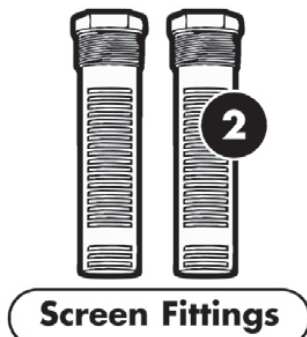
BBF-XS1000

Bubble Washed Bead Filter

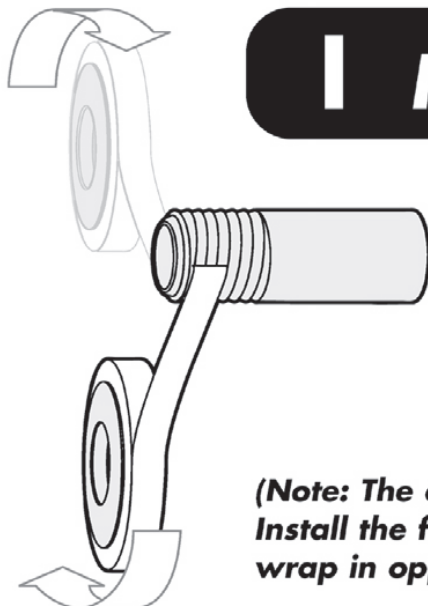
U.S. Patent #5232586



BBF-XS1000 Parts List



IMPORTANT!

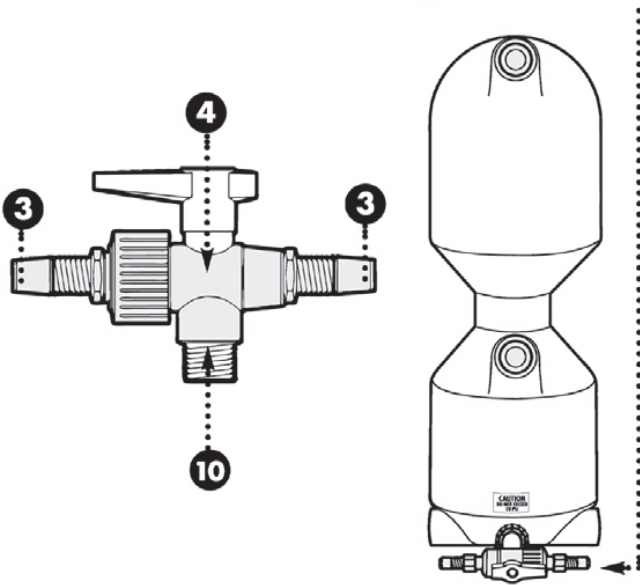


Before assembly **ALL** threaded plumbing parts **MUST** have several wraps of teflon tape applied to the threads.

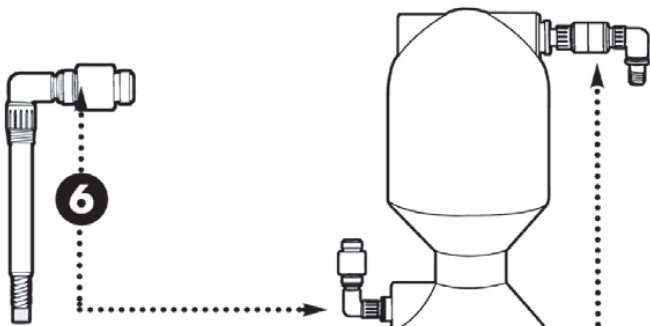
(Note: The direction the tape is wrapped is very important, if when you install the fittings into the filter, the tape starts to peel off, remove and wrap in opposite direction.)

BBF-XS1000 Assembly Instructions

1. Carefully thread a **screen fitting** ② into the bottom of the **filter tank** ①.
2. Assemble the valve ④ using parts ③ and ⑩ as shown. Carefully thread the **PVC nipple** ⑩ into the bottom of filter tank and **tighten until snug**.



3. Insert the **Air Inlet Check Valve Assembly** ⑥ into the side of the filter tank as shown. **Tighten until snug**.



4. Lay the filter tank on its side. Pour **two 8# bags of Bead** ⑫ media into the filter through the threaded fitting at the top of the filter using a funnel.

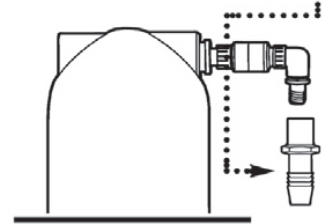
5. Carefully thread the **Screen Fitting** ② into the top of the filter tank.

Because each installation is unique, instructions 6-7 are only suggestions of how basic connections using flexible tubing can be made. Your installation may require the use of rigid PVC pipe and additional valves.

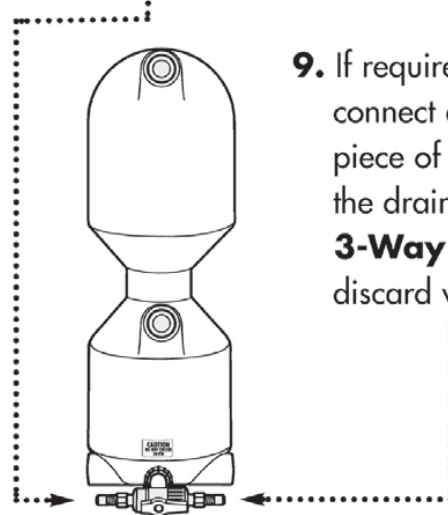
6. Glue the **1" Toe Nipple** ⑪ into the spring loaded **Check Valve** ⑤. Make sure the direction of flow indicated on the spring loaded check valve is facing away from the filter. This will be your water discharge line. Carefully thread **PVC toe nipple** ⑪ on the spring loaded check valve assembly into the top of the filter tank. **Tighten until snug**.

7. A **1" Spigot x Barb** ⑦ has been provided to allow the use of 3/4" ID flexible tubing (not included). Using parts ⑦ and/or ⑧ orient the flow of water from the spring loaded **Check Valve** ⑤ back to the pond as dictated by your installation. Use PVC glue to attach part ⑦ and part ⑧ if used.

8. Connect your pump to one of the **1" MPT x Barb fittings** ③ on the **3-way valve**.



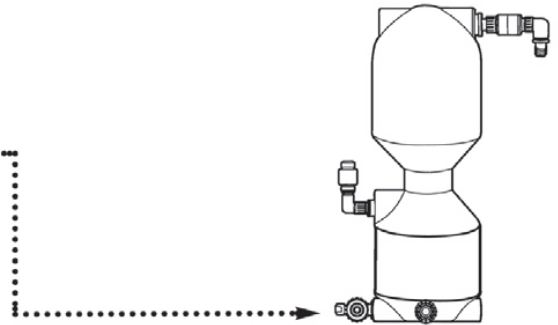
9. If required you can connect an additional piece of 1" hose on the drain side of the **3-Way Valve** to discard waste water.



BBF-XS1000 Operating Instructions

Start Up

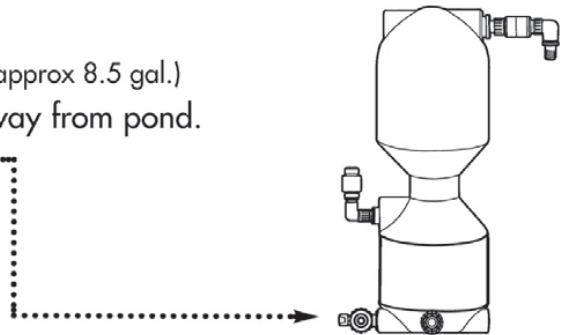
1. Check that all connections are secure.
2. Turn **3-Way Valve** to Pump position.
3. Start Pump.
4. Check all connections for leaks, correct if required.



Backwash Sequence

(This filter loses approximately 8.5 gallons of water when backwashed)

1. Shut off pump.
2. **For indoor use:** Position a bucket to collect waste water, (approx 8.5 gal.)
For outdoor use: Direct the waste water to the ground away from pond.
3. Turn **3-Way valve** to Drain position.
4. Allow the water to completely drain from filter.
5. Turn 3-way valve back to the Pump position.
6. Start Pump.



Backwash Frequency

How often Back Wash cycles are required depends upon the fish load, daily feed rate and water temperature. After your Bubble Bead Filter has been operating one or two days, you can help the biological process along by adding *Bacta-pur* or some other seeding agent safe for fish. Be sure to follow the manufacturer's directions.

Minimum flushing cycles (For heavy loading more frequent cycles are necessary):

- During Spring and Fall Once or twice a week.
- During Summer Four or five times a week.
- During Winter Twice a month.

** Please note: You cannot backwash your filter too often.*



108 Industrial Avenue - New Orleans, LA 70121
email us at info@astfilters.com
www.ASTfilters.com