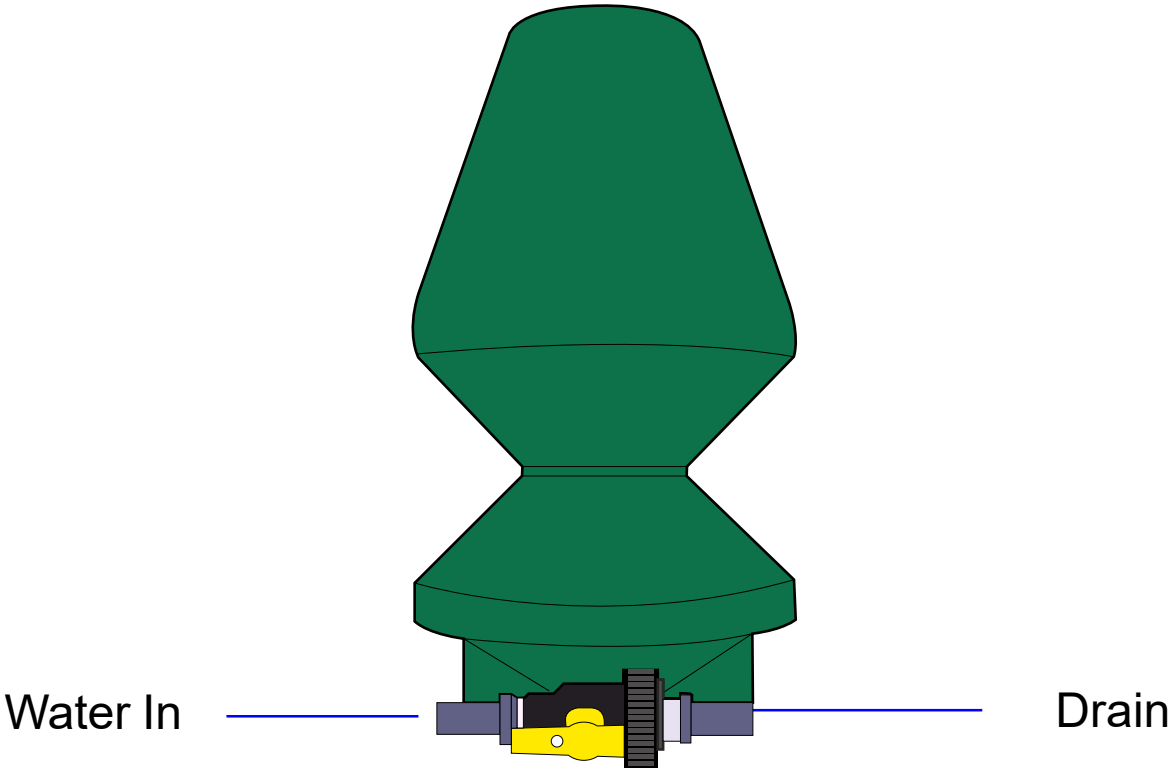
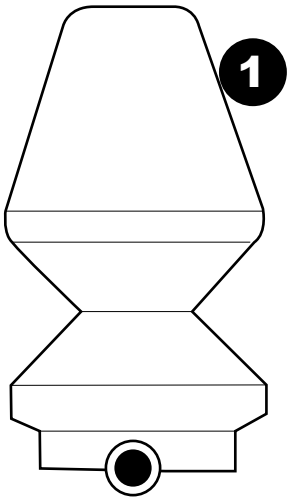
BBF-XS300A

Bubble Bead® Filter

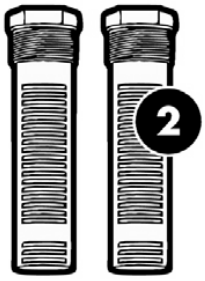


AST™
(504) 837-5575
2120 North 3rd Street
Baton Rouge, LA 70802
info@astfilters.com
www.ASTfilters.com

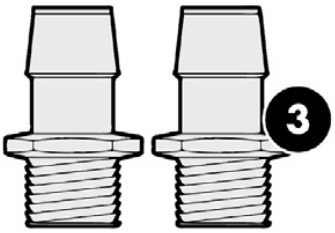
BBF-XS300A Parts List



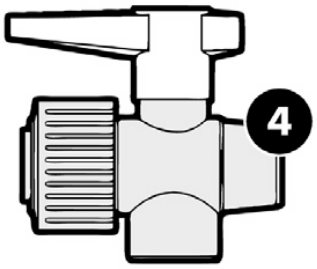
Filter Hull



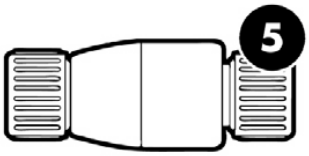
Screen Fittings



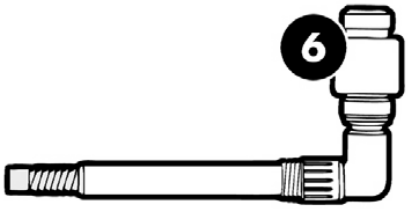
3/4" MPT x Barb Fittings



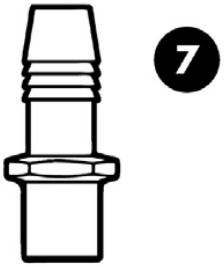
3-Way Valve



3/4" Discharge Spring Check Valve

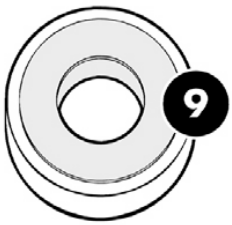


Air Inlet Check Valve Assembly



3/4" Spigot x Barb

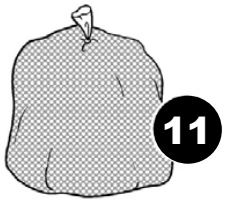
3/4" Street Ell



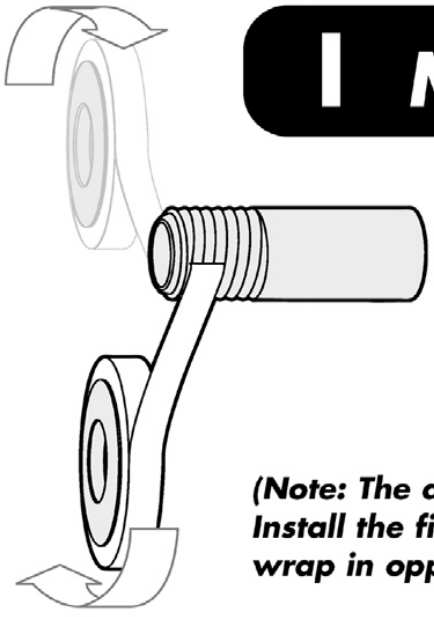
Teflon Tape

3/4" Threaded PVC Nipple

+



#8 Bag of Beads



IMPORTANT!

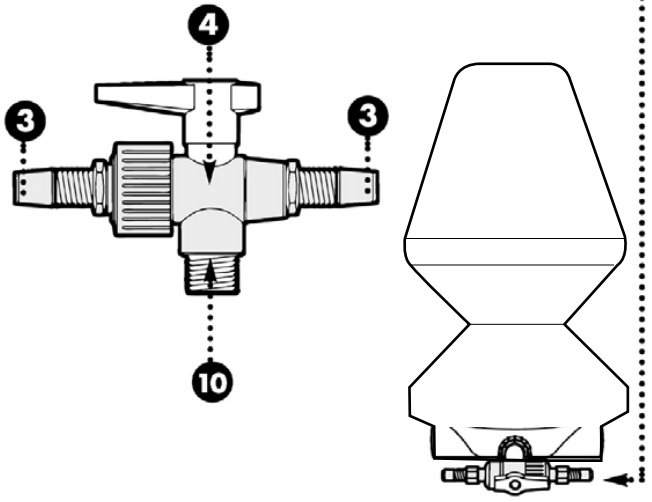
Before assembly **ALL** threaded plumbing parts **MUST** have several wraps of teflon tape applied to the threads.

(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.)

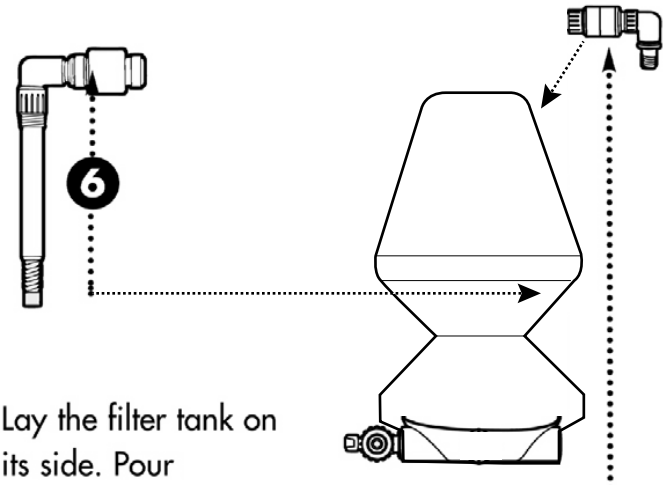
BBF-XS300 Assembly Instructions

1. Carefully thread a **screen fitting** ❷ into the bottom of the **filter tank** ❶ **.**

2. Assemble the valve ❹ using parts ❸ and ❿ as shown. Carefully thread the **PVC nipple** ❿ into the bottom of filter tank and **tighten until snug**.



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



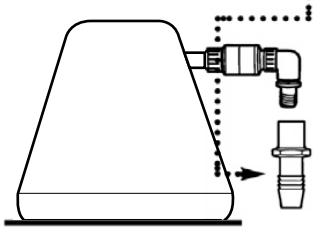
4. Lay the filter tank on its side. Pour **the 1/4 cubic foot bag of** media into the filter through the threaded fitting at the top of the filter using a funnel.

5. Carefully thread the **Screen Fitting** ❷ 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.

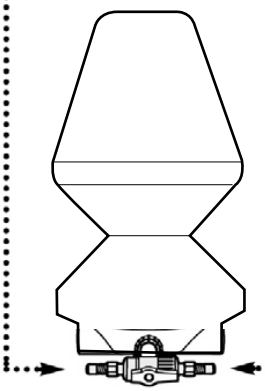
6. **Carefully thread the PVC nipple on** the spring loaded **Check Valve** ❺ **.** Make sure the direction of flow indicated on the spring loaded check valve is facing away from the filter. This will be your water discharge line. Carefully thread **PVC toe nipple** ⓫ on the spring loaded check valve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

7. A **¾" Spigot x Barb** ❼ has been provided to allow the use of 3/4" ID flexible tubing (not included). Using parts ❼ and/or ❽ orient the flow of water from the spring loaded **Check Valve** ❺ back to the pond as dictated by your installation. Use PVC glue to attach part ❼ and part ❽ if used.



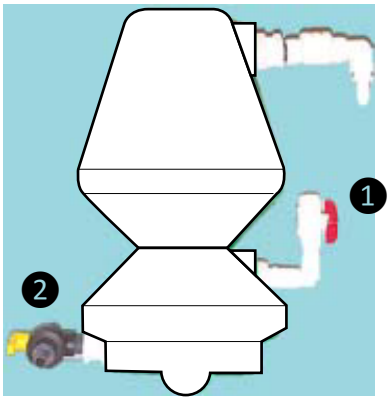
8. Connect your pump to one of the **¾" MPT x Barb fittings** ❸ on the **3-way valve.**

9. If required you can connect an additional piece of **¾"** hose on the drain side of the **3-Way Valve** to discard waste water.



BBF-XS300A Operating Instructions

Start Up



1. Check that all connections are secure
2. Close Air Vent valve ❶
3. Open 3-Way Valve to Pump position ❷
4. Start Pump
5. Check all connections for leaks, correct if required.

Bubble Wash Cycle

1. Shut off pump
2. **For indoor use:** position a Bucket to collect waste water, (Approx. 2.5 Gal.)
   For outdoor use: direct the waste water to the ground away from pond
3. Open 3-Way valve to Drain position
4. Open Air vent valve
5. Allow the water to completly drain from filter
6. Close Air vent valve
7. Open 3-way valve to Pump position
8. Start Pump

Frequency of Bubble Wash Cycles

How often Bubble Wash cycles are required depends upon the fish load, daily feed rate and temperature.

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

√	During Spring and Fall	Once a week
√	During Summer	Three to four times a week
√	During Winter	Once or twice a month

Model BBF-XS300A loses approximately 2.5 gallons when flushed.

BBF-XS300A

Power Drain kit

A power drain is installed by connecting a small pump to the drain outlet and using it to pump the waste water out during the backwash cycle. This creates an enhanced cleaning action by rapidly draining the water from the filter. The faster the water leaves the filter the more vigorous the backwash. This will also allow you to pump the waste water to a drain or sump which is higher than the bottom of the filter.

BBF-XS300A
Operating Instructions

Make sure all valves are set to correct position. Start pump. Check for leaks. You will hear some chattering from beads as filter fills. Once full, noise will stop. If there are no leaks and water output is normal, your Bubble Bead Filter is operating properly. You should check operation and connections every day.

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 manufacture's directions.

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

√	During Spring and Fall	Once a week
√	During Summer	Three to four times a week
√	During Winter	Once or twice a month

Model BBF-XS300A loses approximately 2.5 gallons when flushed.

To flush your Bubble Bead filter, follow these simple steps:

1. Turn off pump.

2. Rotate the handle of the three-way valve 180 degrees so that the arrow on the handle points toward the drain line. This will close the line from the pump and open the drain line. Open the air inlet vent valve, you will hear the vent valve sucking air and churning of beads as air boils up into the filter. Best results are obtained when filter is allowed to drain completely. Observe waste water; large particles caught by bottom screen will wash out first. Grunge trapped by beads will wash out near the end of flush.

4. Rotate the three-way valve 180 degrees so that the arrow on the handle points towards the pump, close the air inlet vent valve. Now is a good time to clean strainer basket on pump.

5. Turn the pump on. It is normal for the first 1-2 gallons of water flowing from the filter after a backwash to be dirty. If this causes you concern you modify your plumbing to direct this water to the drain.

IF YOU WILL NOT BE OPERATING FILTER DURING WINTER, DRAIN WATER FROM THE FILTER HULL AND OPEN ALL BALL VALVES TO PROTECT FROM DAMAGE DUE TO FREEZING.