



flotenderTM

Installation, Service & Troubleshooting Manual

GS Series Greywater Irrigation Systems

www.flotender.com

GS

Thank you for purchasing a Flotender™ Greywater Irrigation System. This installation manual will guide you through a Flotender™ GL Series installation. Additional instructions are also included with individual kits and accessories. If you have any questions feel free to contact us at support@filtrific.com, or call (425) 643-2312.

Table of Contents

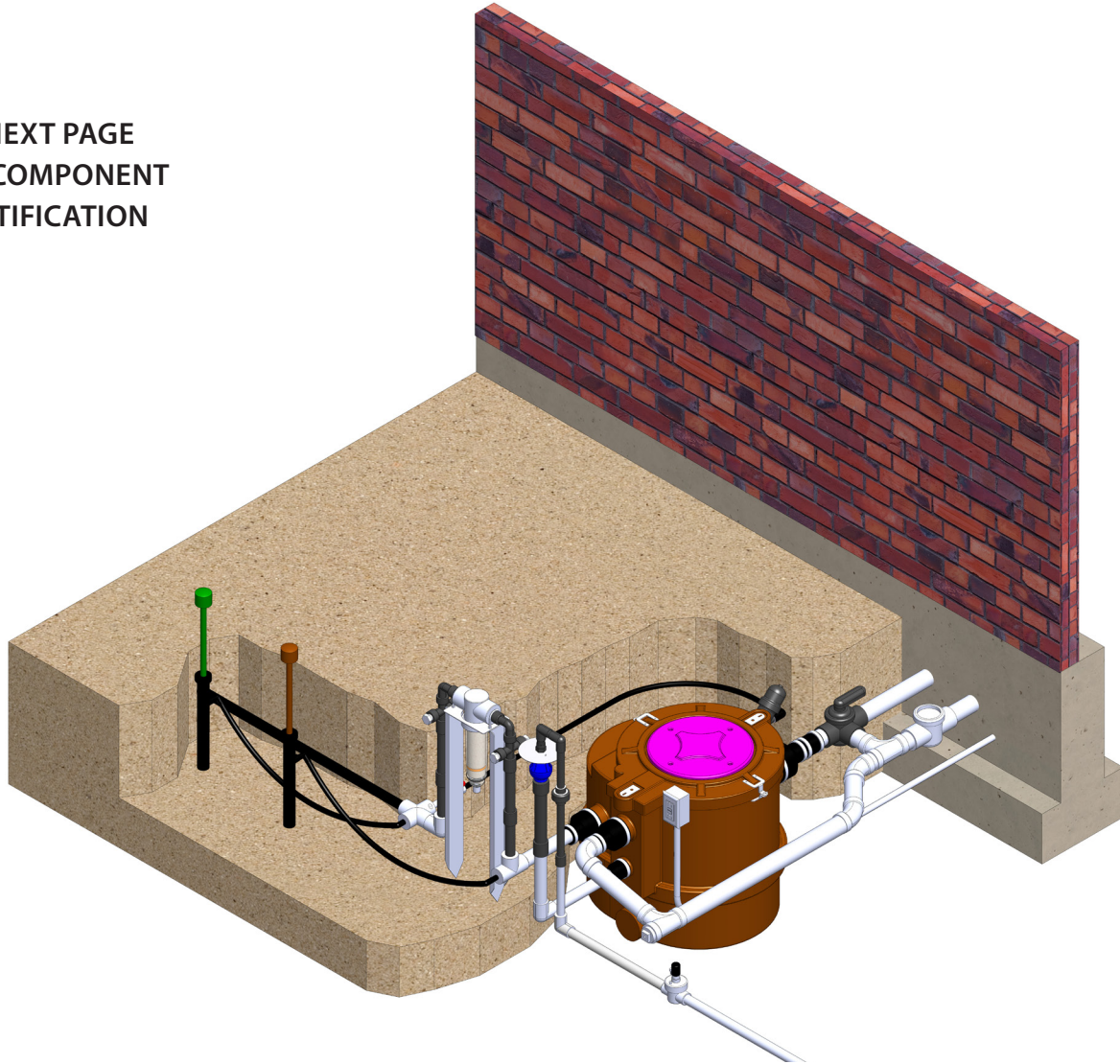
INSTALLATION

Step 0: System Overview	02
Step 1: Processor Placement.....	04
Step 2: Reservoir Connection.....	07
Step 3: Overflow Connection.....	08
Step 4: Secondary Filter & Misc. Connections.....	09
Step 5: Auto-Fill Connection.....	11

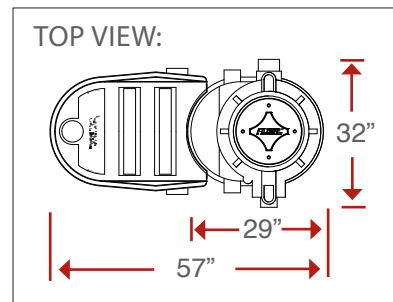
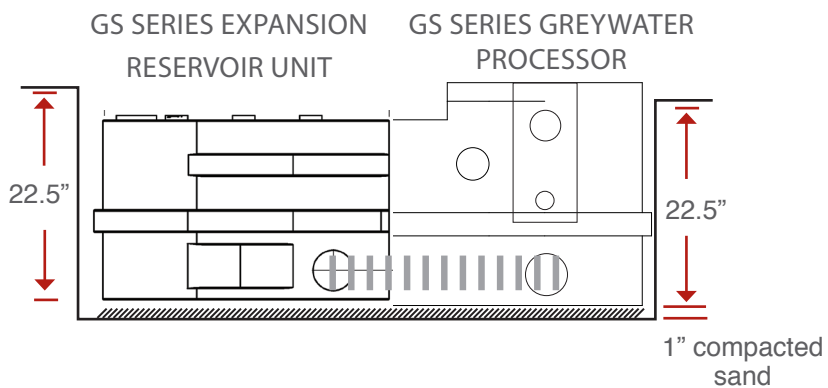
OPERATION & SERVICE

Service Guidelines.....	12
Cleaning Secondary Filter.....	14
Cleaning Primary Filter.....	17
Accessing Greywater Processor.....	19
Accessing Filter Wash Disc Filter	22
Troubleshooting.....	23
System Warranty.....	24

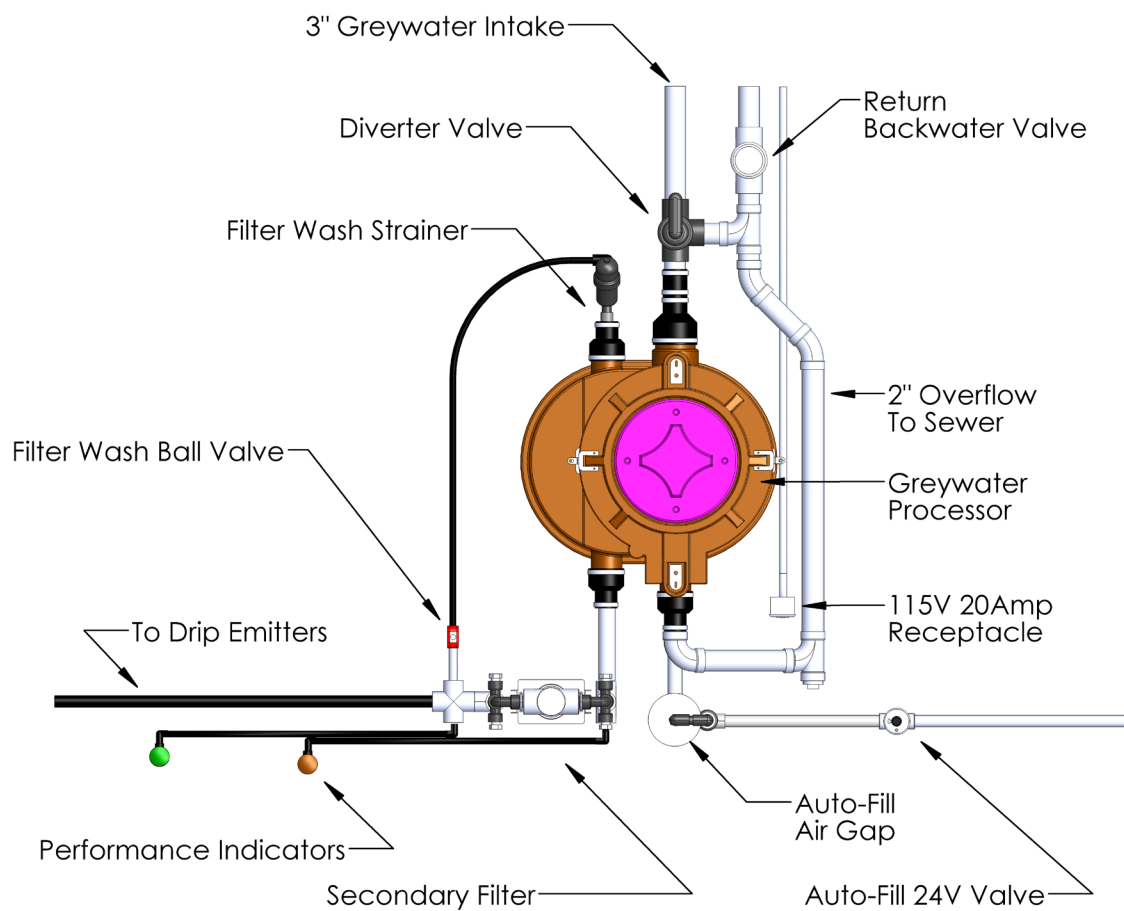
SEE NEXT PAGE
FOR COMPONENT
IDENTIFICATION



**FLOTENDER GREYWATER PROCESSOR DIMENSION
(OPTIONAL EXPANSION RESERVOIRS ALSO PICTURED)**



Flotender GS Series Greywater System



SYSTEM INSTALLATION

PROCESSOR
PLACEMENT

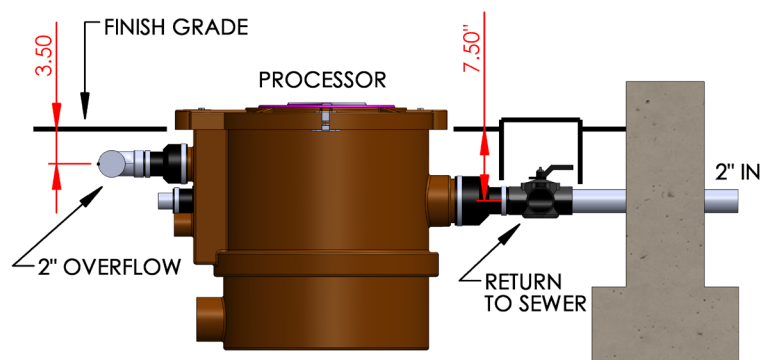
The first step in the Flotender system installation is to determine the location of the greywater processor. In-flowing greywater must be either gravity-fed from the building's greywater stub-out or pumped into the greywater processor using an external transfer station. (sold separately)

ABOVE-GROUND GREYWATER PROCESSOR INSTALLATIONS:

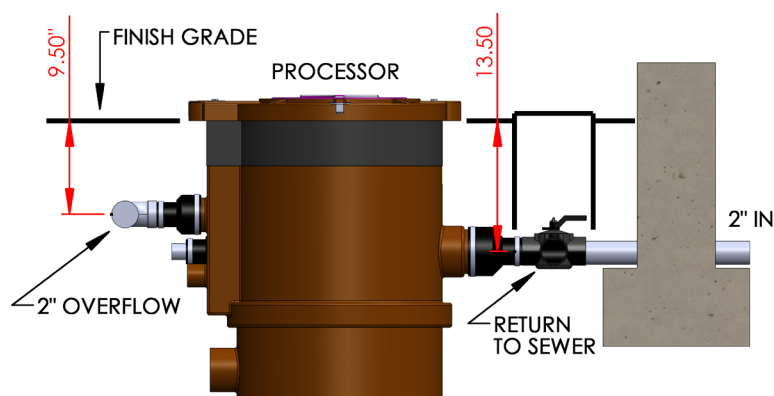
Ensure that the greywater processor is placed at an elevation which can be gravity-fed from the stub-out in the building. It is recommended that the processor and external components are placed on a level surface with at least 29" of clearance above the top of the processor's lid for filter removal.

FOR IN-GROUND GREYWATER PROCESSOR INSTALLATIONS:

For in-ground installations, excavate and place the Greywater Processor on 1 inch of compact sand. Sand will protect the bottom of the processor from sharp objects and help in leveling. Refer to the following diagrams when placing the greywater processor in the ground. Ensure that the incoming greywater is able to gravity-flow from the building stub-out.



**STANDARD STUB-OUT
DEPTH**



**LOW GREYWATER STUB-
OUT SHOWN WITH
OPTIONAL PROCESSOR LID
EXTENSION**

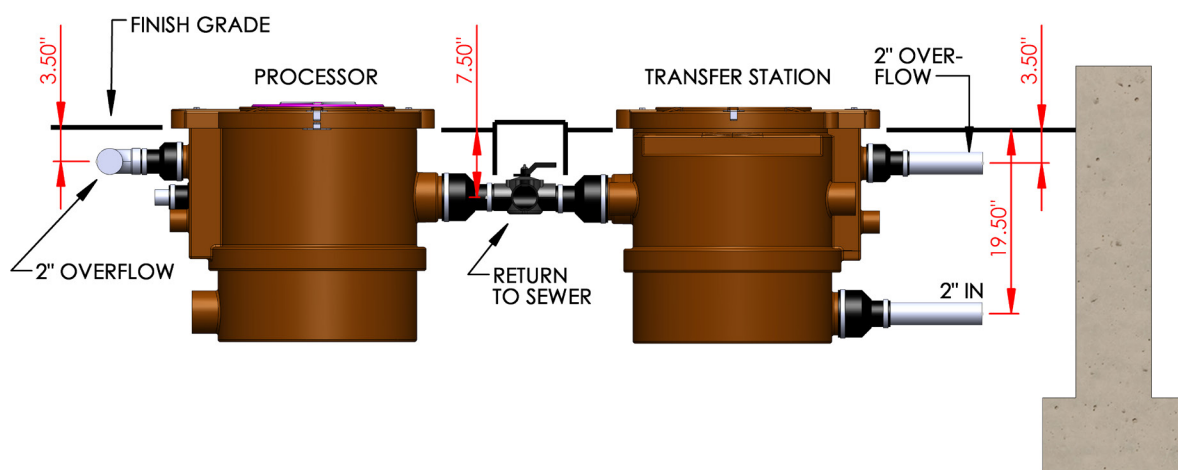
PROCESSOR PLACEMENT

SYSTEM INSTALLATION

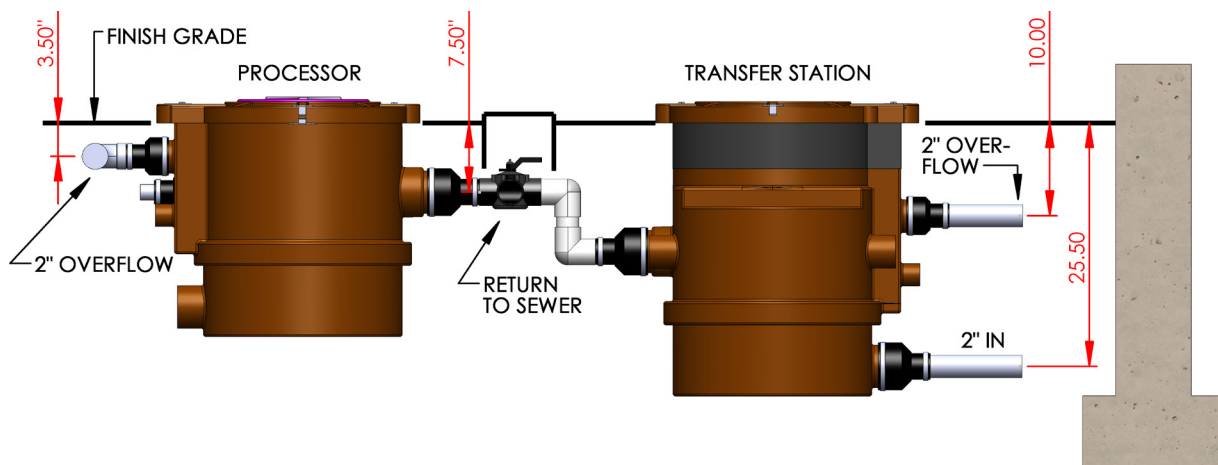
LOW GREYWATER STUB-OUTS

For installations where the greywater stub-out is below the intake of the greywater processor, a transfer station may be installed. The transfer station features a built-in pump, and activation float switch which pumps the incoming greywater up and into the greywater processor intake port.

GREYWATER PROCESSOR WITH TRANSFER STATION



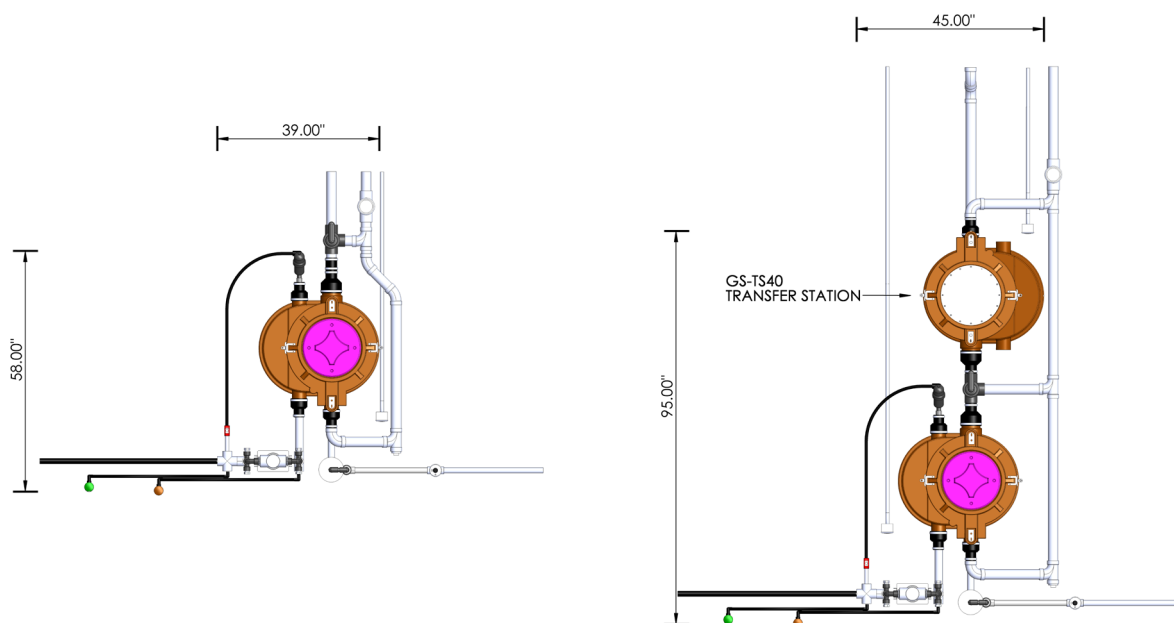
GREYWATER PROCESSOR WITH TRANSFER STATION AND LID EXTENSION



SYSTEM INSTALLATION

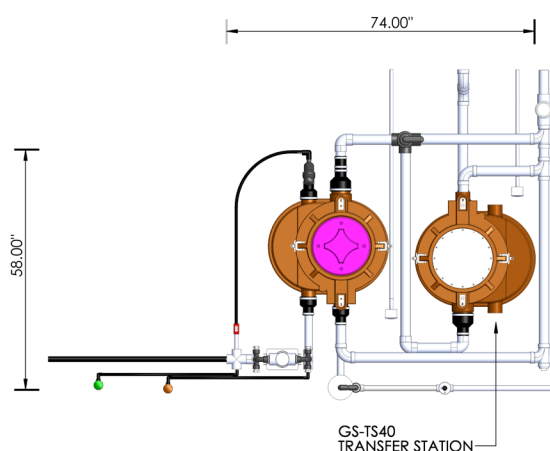
PROCESSOR
PLACEMENT**CHOOSE A LOCATION FOR THE GREYWATER PROCESSOR & COMPONENTS**

Refer to the schematics below and determine the orientation in which the greywater processor and components will be placed.



TOP LEFT: STANDARD GS SYSTEM

TOP RIGHT: STANDARD GS SYSTEM WITH A FRONT POSITIONED TRANSFER STATION



LEFT:
STANDARD GS
SYSTEM WITH A SIDE
POSITIONED TRANSFER
STATION

(3-WAY ACTUATOR
RECALIBRATION
REQUIRED FOR THIS
CONFIGURATION)

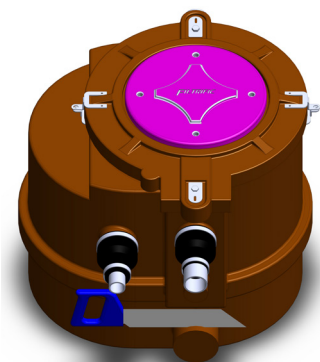
Step 2

RESERVOIR CONNECTION

SYSTEM INSTALLATION

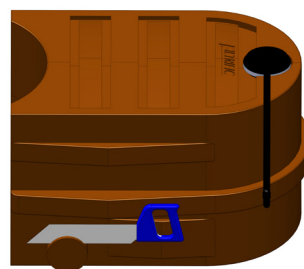
Once the greywater processor has been placed and the greywater stub-out connected, the expansion reservoirs can be connected.

STEP: 1



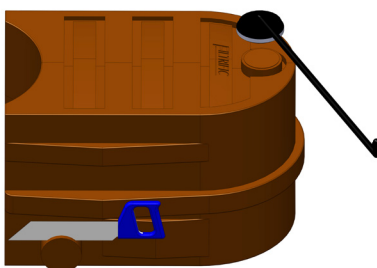
Cut 3/4" off of the end of the port labeled "More Capacity" on the Greywater Processor.

STEP: 2



A "More Capacity" port is located on both sides of the Expansion Reservoir. Cut off the port that will be on the same side as the Greywater Processor's "More Capacity" port when slid together.

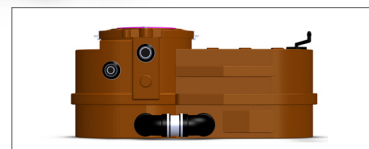
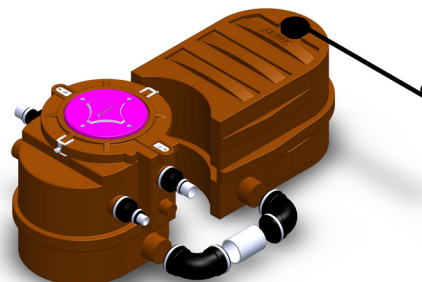
STEP: 3



One vent assembly is included with each expansion reservoir. Place the vent cap over the pre-drilled hole on the top of the expansion reservoir and tighten the cap.

The vent can also be extended or relocated by using the optional barbed fittings and flexible pipe.

STEP: 4



Connect expansion reservoirs to the processor as shown.

This 3D cutaway illustration shows a complex plumbing setup for a basement. On the left, two vertical pipes are capped with green and orange floats. These connect via black piping to a central assembly featuring a white filter or aerator unit. This unit is linked to a large brown cylindrical tank with a prominent pink circular lid. The tank has multiple ports at its base, some with black caps. White PVC pipes exit the tank area, connecting to other fixtures like a toilet flange. A network of black and grey pipes also connects different components, including what appears to be a water supply line with a blue handle. The entire installation is situated within a concrete foundation, with a red brick wall visible on the right side of the frame.

- **Overflow Return Line**

Overflow Port on Greywater Processor

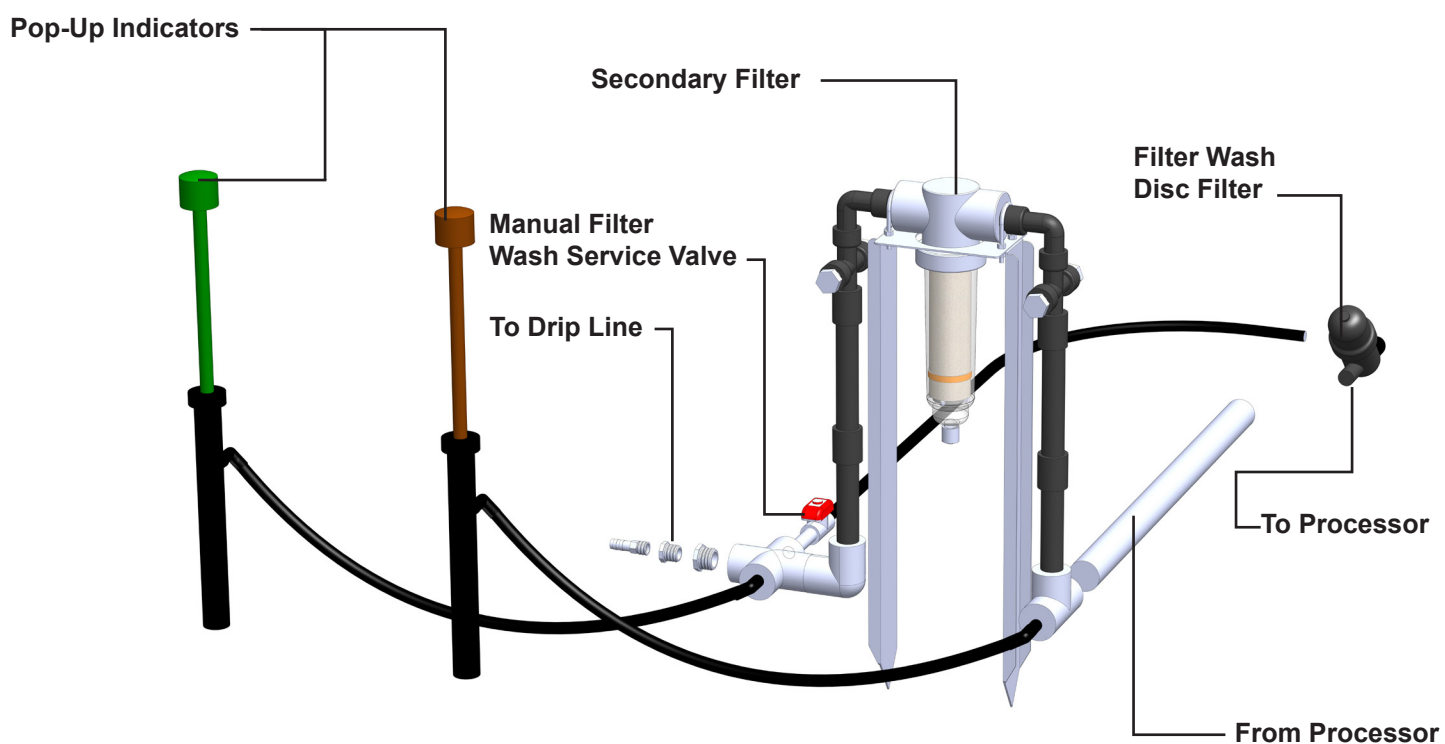
A 3D cutaway diagram of a wastewater treatment system. The system is installed in a concrete structure. A brown cylindrical tank with a pink top is connected to a network of white and black pipes. A pump unit with a blue float valve is connected to the system. Two vertical pipes with green and orange caps are also shown. The diagram illustrates the internal components and flow paths of the system.

- **Overflow to Septic**

SECONDARY FILTER & MISC. CONNECTIONS

SYSTEM INSTALLATION

Connect the secondary filter and misc. external connections as pictured below.



FILTER WASH CONNECTION

Connect the filter wash disc filter to the pressure regulator on the processor. Connect the 1/2" poly pipe to the barb on the tee filter.



(1/2 HP models will not have a pressure regulator)

POP-UP INDICATOR CONNECTION

Connect the pop-up indicators to the poly pipe



Green connects to the poly pipe leading from the discharge side of the secondary filter.

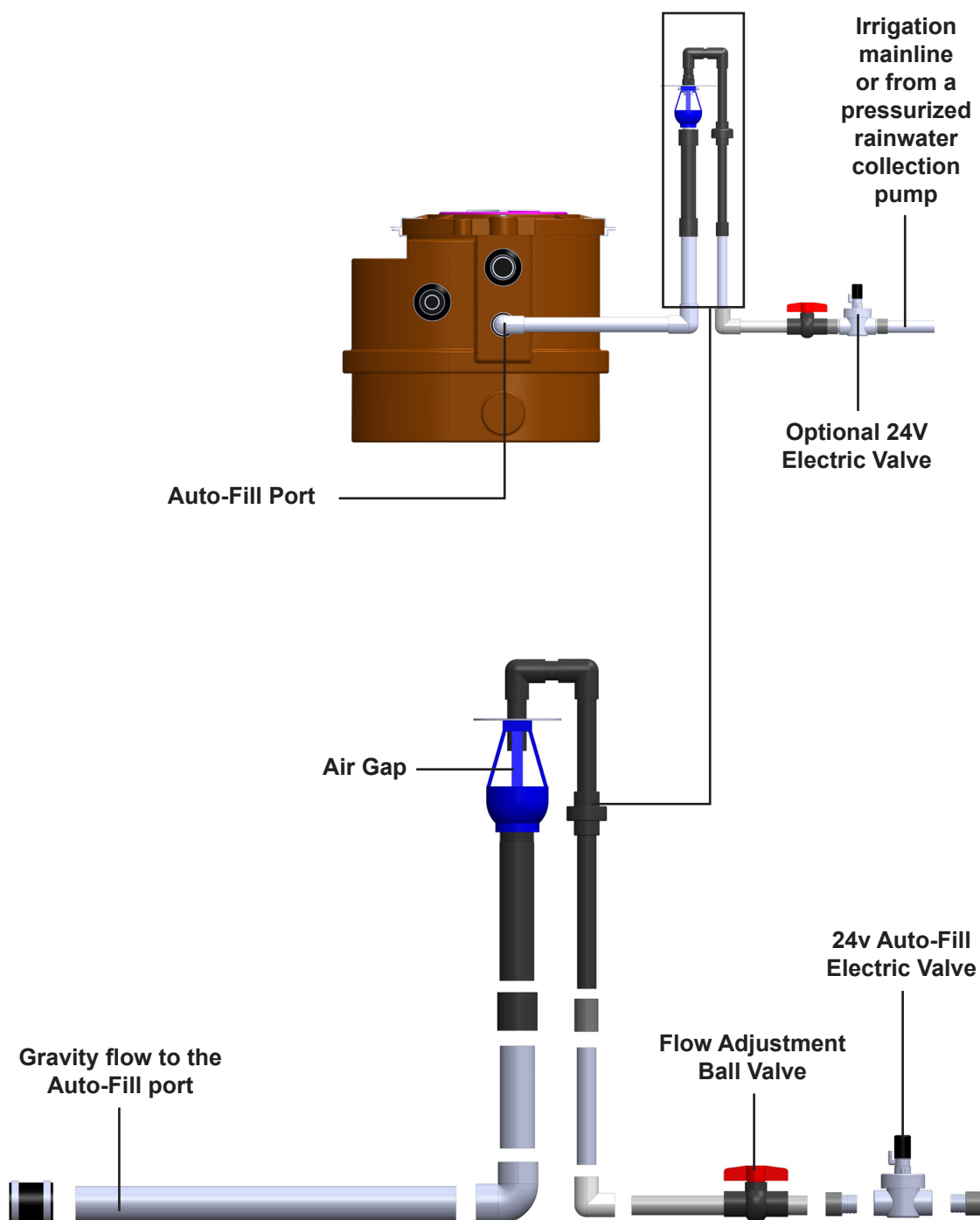


Brown connects to the poly pipe leading from the supply side of the secondary filter.

AUTO-FILL CONNECTION

SYSTEM INSTALLATION

Connect the auto-fill assembly to the port labeled “auto-fill” as pictured below. Reduce the flow as needed to avoid excessive water flow.



The Flotender GS System requires periodic maintenance. The following are recommendations based on average usage as detailed below:

Service Guidelines for Systems with a Washing Machine Connected	
Primary Filter:	6 months (recommended)*
Secondary Filter:	1 month (required)**

Service Guidelines for Systems without a Washing Machine Connected	
Primary Filter:	1 year (recommended)*
Secondary Filter:	6 months (required)**

The Flotender primary filter is self-cleaning however for maximum water conservation it is recommended that the primary filter is manually cleaned per the intervals detailed above or more frequently for heavy use.

***NOTE:**

When using the overflow flush tubes, excessive collected debris is removed from the bottom of the basket when filter draining becomes impaired. For maximum water conservation, clean the filters in shorter intervals before the filter baskets reach the point of self-flushing.

****NOTE:**

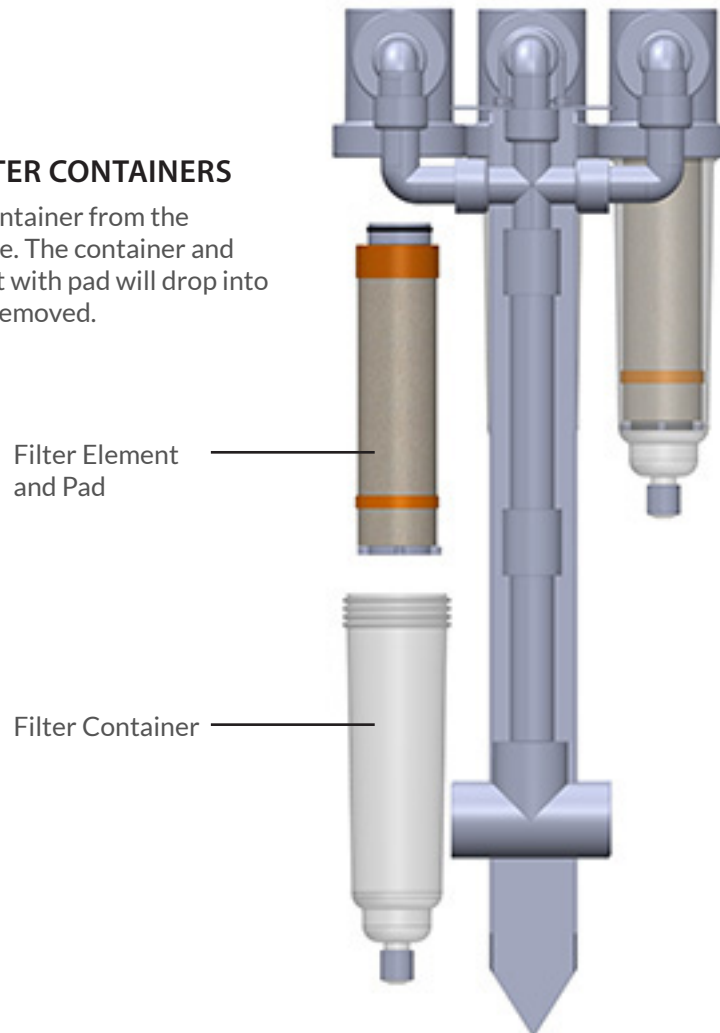
To reduce the service intervals add up to two additional secondary filter modules.

NOTE:

Disconnect the power from the pump before servicing the filter.

STEP 1:**REMOVE THE FILTER CONTAINERS**

Unscrew the filter container from the secondary filter frame. The container and the enclosed element with pad will drop into the container when removed.

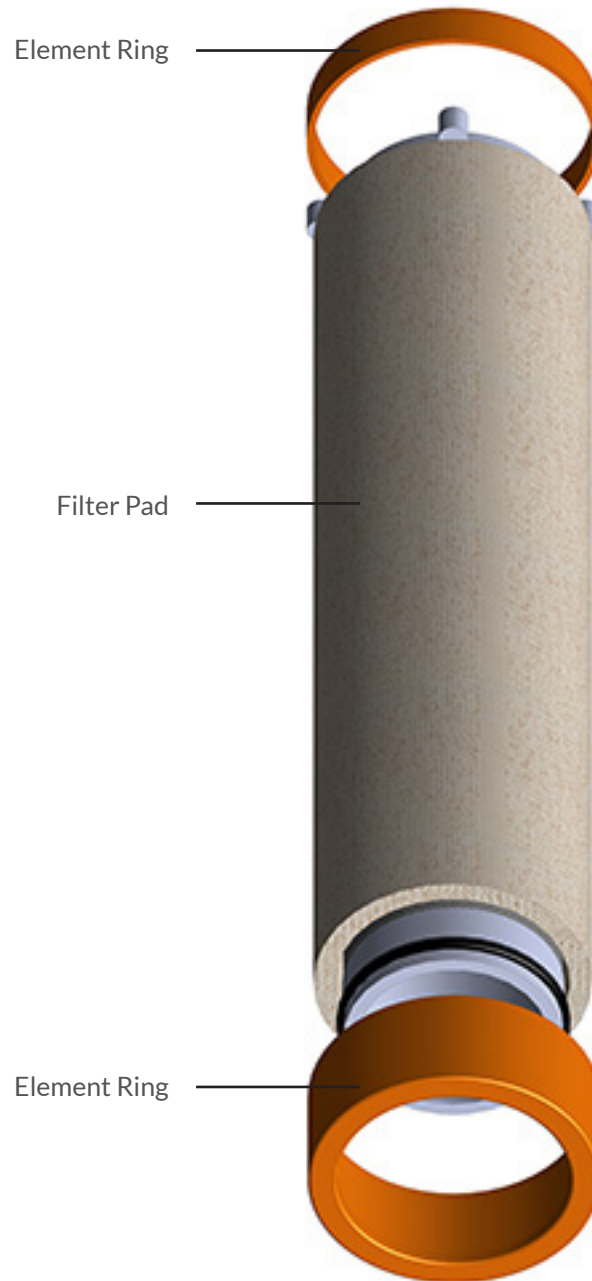


CLEANING SECONDARY FILTER

SYSTEM SERVICE

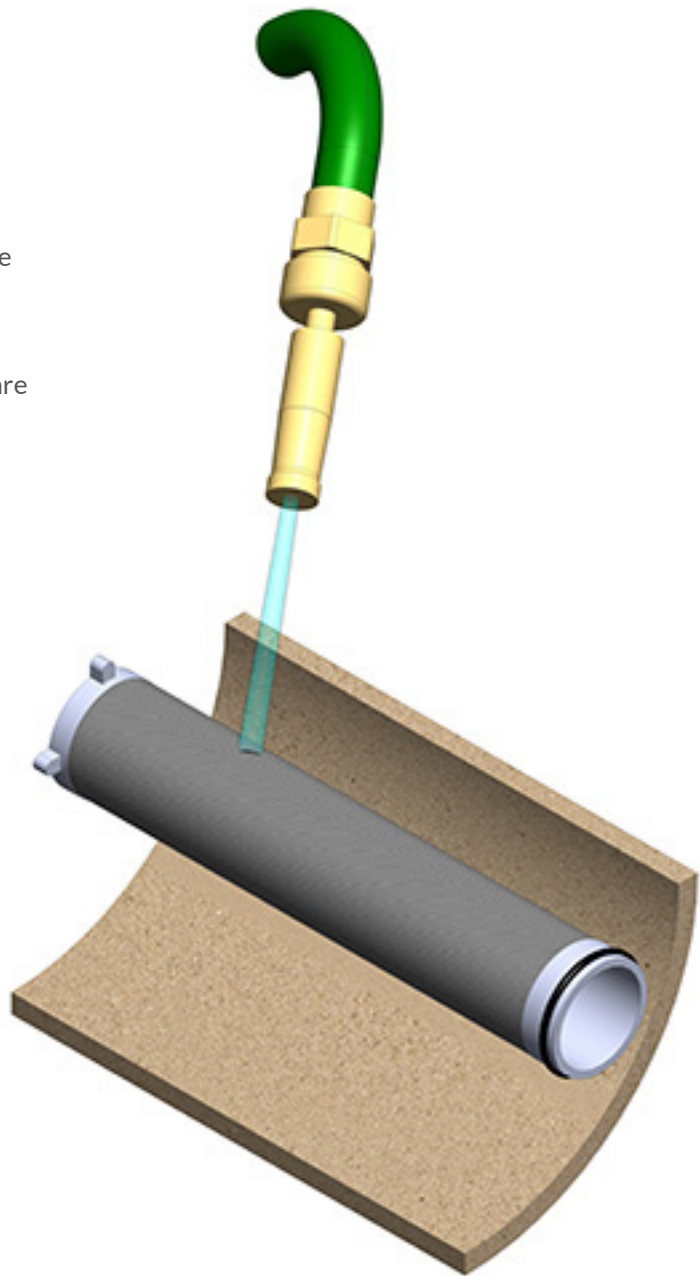
STEP 2: REMOVE THE FILTER PAD

Remove the top and bottom ring from the filter element.



STEP 3:
REMOVE DEBRIS FROM FILTER
ELEMENT AND PAD

Using a standard garden hose, rinse off the element and pad to remove any attached debris. In some cases where heavy debris has been captured, it may be necessary to replace the filter pad. Replacement pads are available from Flotender.



CLEANING PRIMARY FILTER

SYSTEM SERVICE

Although the primary filter is self-cleaning, it is recommended that the filter is periodically cleaned to retain optimum system efficiency and functionality.



REMOVE ACCESS CAP

Turn the knobs on each side of the cap so they are parallel and past the dot as shown.

REMOVING FILTER FLUSH TUBE

Occasionally, it is recommended that the primary filter is manually cleaned. In order to access the primary filter, the overflow flush tubes must be removed.



STEP 1:

Pull back on the Filter Flush Tube to disconnect pipe from the overflow port.

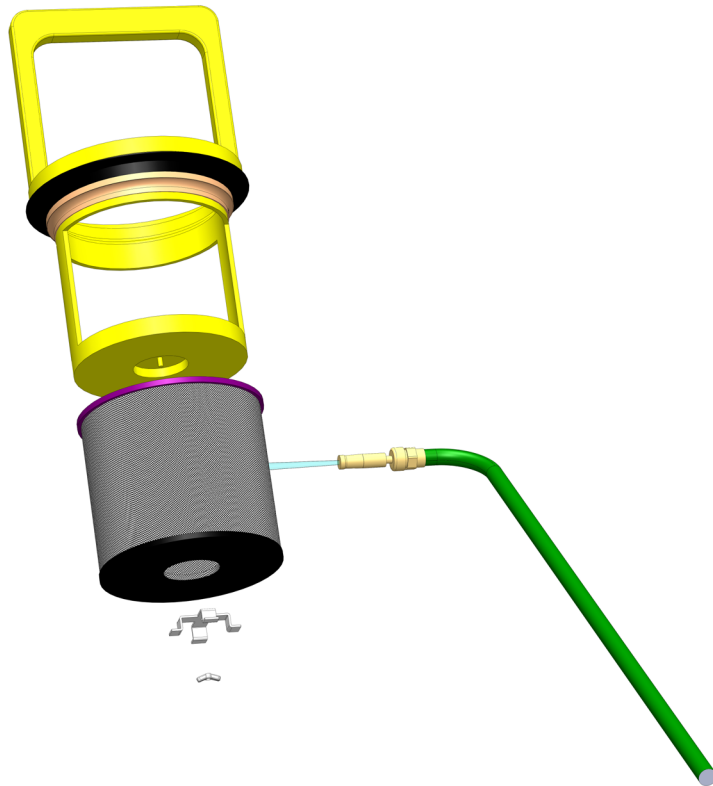


STEP 2:

Lift the Filter Flush Tube from the Filter Carriage. The Primary Filter Baskets can now be lifted out.



Remove the filter screen from the filter frame by loosening the wing nut on the bottom of the basket. Use a standard garden hose to spray debris from the basket. Once the debris is removed from the basket reconnect the screen, replace the basket in the processor and reconnect the overflow flush tube.



ACCESSING GREYWATER PROCESSOR

SYSTEM SERVICE

Follow the steps below to access the internal components inside of the Greywater Processor.

**STEP 1:**

Remove front and back connection bolts.

**STEP 2:**

Remove side connection bolts.

**STEP 3:**

Remove poly-mat, overflow flush tubes and filter baskets.

**STEP 4:**

Remove the bolt at the back of the filter carriage.

**STEP 5:**

Disconnect the overflow and lift the back of the filter carriage to clear the metal wash assembly while pulling on the carriage then lift out.

DISCONNECTING OVERFLOW FROM CARRIAGE:



Overflow connected to carriage



STEP 1:
Rotate the fastening nut left or right 90 degrees to free the collar from the carriage.



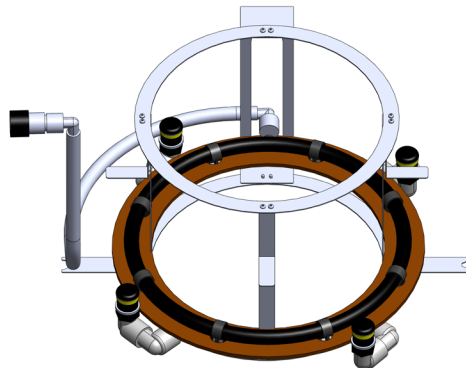
STEP 2:
Orient the fastening nut to the flange as shown then pull back on the accordion overflow tube.

ACCESSING GREYWATER PROCESSOR

SYSTEM SERVICE

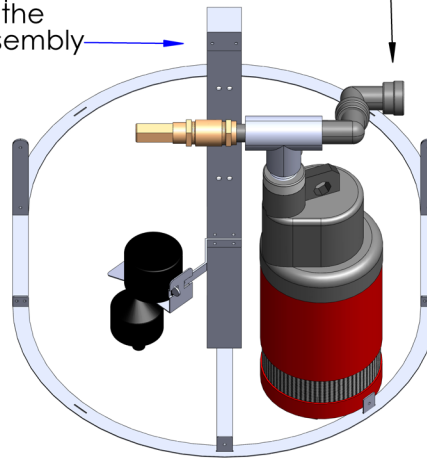
After the filter carriage has been lifted out, internal components are easily removed for inspection or future servicing.

Lift out Filter Wash Assembly



Remove the 2 top screws to lift out the Pump Switch Assembly

Disconnect the union to allow the pump to be lifted out



SYSTEM SERVICE

**FILTER WASH
DISC FILTER**

The filter wash disc filter prevents initial installation pipe debris from plugging the internal wash system. Unless there has been a disruption to the system this is not a regular maintenance item. See pages 3 and 10 for location.



TROUBLESHOOTING

Although the primary filter is self-cleaning, it is recommended that the filter is periodically cleaned to retain optimum system efficiency and functionality.

PROBLEM:	SOLUTION:
Minimal water is coming out of the drippers and neither performance indicators are fully popped up.	Both the primary and the secondary filter needs to be cleaned.
Minimal water is coming out the drippers and the brown indicator (pump) has fully popped up but the green indicator has not popped up.	The secondary filter needs to be cleaned.
Both filters have been cleaned and the pop-up indicators are still not fully popping up. Note: If not draining back to the sewer make sure the receiving area is sufficient to not cause water to backup over the top of the filter carriage.	The screen at the base of the pump has become restricted with micro particles. Remove the filter carriage and lift out the pump and wash off the pump intake.
The pump will not turn on.	Make sure there is power to the outlet, the filters have been cleaned, and there is at least 3" of water at the bottom of the tank to engage the pump switch. If the pump still is not pumping, unplug the piggy-back cord connection and plug the pump directly into the outlet. If the pump starts pumping then the float switch is defective. If the pump motor still does not start, then the pump will need to be serviced.
Filter wash nozzles are not spraying	Installation debris has collected in the filter wash strainer. Remove the filter disc element & wash debris. See page 10 for the filter wash disc filter location.

SYSTEM WARRANTY

LIMITED TRADE WARRANTY

The Filtrific Co. LLC (Filtrific) offers a 5 year warranty on all Flotender polyethylene components. All other products and accessory components are warranted to be free of defects in material and workmanship for a period of one (2) years from the original date of purchase. This warranty extends only to the original installer of the Flotender system. Filtrific will repair or replace any properly handled and installed product which fails under normal operating conditions within the warranty period, providing it was installed and maintained correctly, and all materials are returned to the factory (shipping prepaid). This warranty does not extend to labor or replacement charges, nor does it apply to any equipment of another manufacturer used in conjunction with Flotender products. Filtrific shall not be held liable for indirect, incidental, or consequential damages to Flotender products.



Flotender™ by Filtrific®
13280 NE Spring Blvd.
Bellevue, WA 98005
P: 800.906.0604 • F: 425.482.9559

www.flotendersystem.com

Copyright 2015 by Filtrific® Company LLC. Printed in U.S.A.
Certain products illustrated in this installation guide are
protected by applicable patents and patents pending.
Filtrific® will aggressively defend all of its intellectual
property.

Optional Accessories GS Series Systems

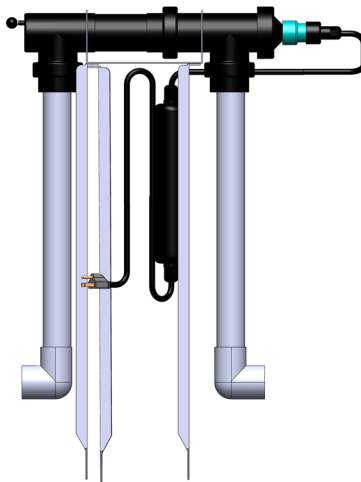
www.flotender.com



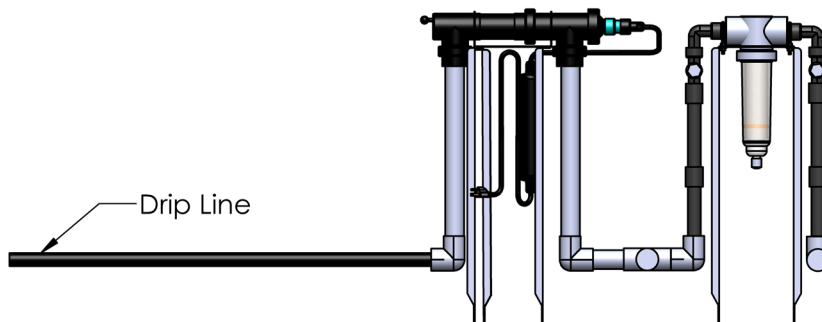
GreyLink™
Smart Greywater Irrigation Systems

Ultraviolet Sterilizer System

UV-57 Optional Ultraviolet Sterilizer
115V, 57 Watt



Connect After the Secondary Filter





GreyLink™

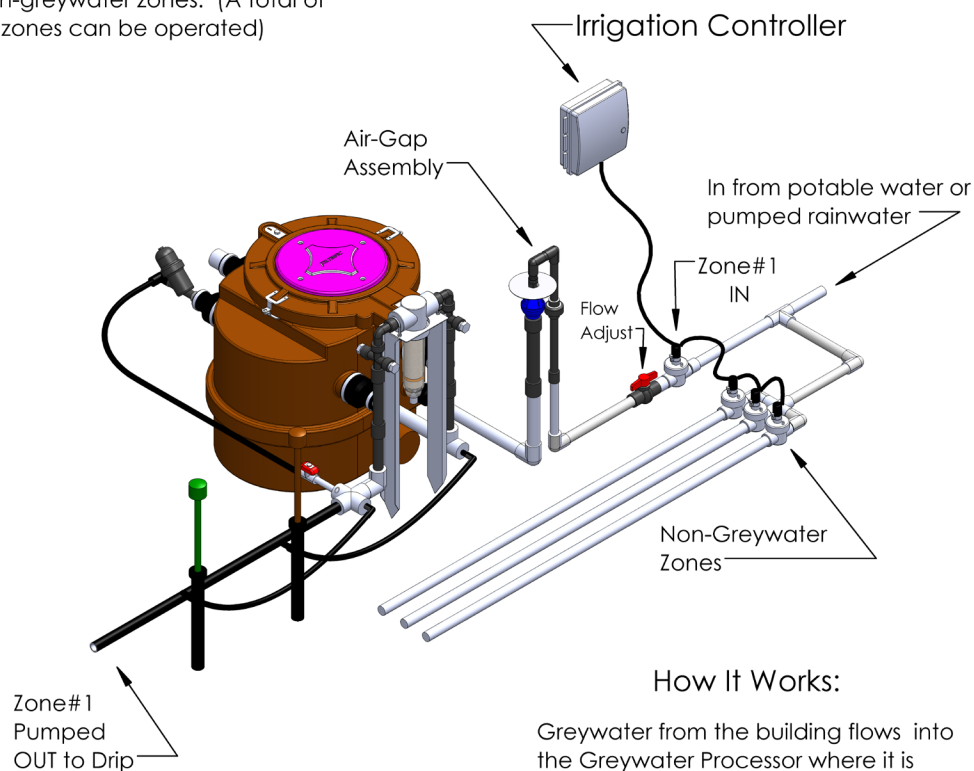
Smart Greywater Irrigation Systems

GS Flotender Automation Option 1

Add a Scheduled Auto-Fill and Non-Greywater Zones

MZ-3 Automation Package

Provides for controller programmed potable water or pumped rainwater to be added to the greywater zone as well the operation of 3 other non-greywater zones. (A total of 16 zones can be operated)



How It Works:

Greywater from the building flows into the Greywater Processor where it is immediately pumped out to the landscape. If the building greywater is insufficient or when away on vacation Zone# 1 can be programmed to add additional water as needed. Since this Auto-fill Option is not sensor controlled, the flow-adjust valve should be set to not exceed the pump-out rate.

Required:

- MZ-3 Automation Package
- Airgap Assembly