ORGANIC SCAVENGER SYSTEMS
O&M Manual

Rethinking Water

Introduction

Thank you for purchasing your Organic Scavenger System. Please read this manual before attempting assembly/installation. **Only attempt assembly/installation of this system if you have been suitably trained.**

Assembly Instructions

Larger systems are supplied as components as they must be built on site. Please follow the instructions below to assemble your system. If your system does not require assembly, please proceed to 'Installation Instructions':

1. If possible, place the pressure vessel in its final location before filling. Block the top of the riser tube to stop resin getting down the tube. Add approx. 1/3 volume of water to the vessel so when the media is poured in, it doesn't damage the lower screen/lateral.
2. Add the media supplied with a funnel but ensure there is free space left above the media (typically 30%) so that when the system is backwashed the resin can expand into the space and any sediment or contaminants can be backwashed away (there may be media leftover). Also ensure the riser tube stays central in the vessel. Unblock the riser tube, clean the vessel threads with a small brush & sweep up any spilled media.
3. Fit the top screen to the valve and slide the valve onto the riser tube and gently push it down onto the vessel threads. Screw the valve in to the resin vessel, taking care not to cross the threads. Excessive force should not be needed as the valve is running in to the vessel. Finally tighten to approximately 20 ft/lbs torque. Adjust position of vessel to line up pipework connections, not the position of the valve on the vessel.
4. Position the brine tank and connect the brine line to the valve head (3/8" push fit) and to the J-Tube (3/8" compression), above the overflow. Ensure that the J-Tube compression fitting is tightened to prevent air draw.

Installation & Commissioning Instructions

Firstly, the area needs to be level, have access to electricity and an open drain. Your system has been designed to operate at between 1.7 and 5 bar pressure. If your pressure falls outside these parameters, it may be necessary to fit a booster pump or a pressure reducing valve to prevent damage to the unit. The operating temperature range of the appliance is 3°C and 45°C. Please observe all local regulations concerning the installation of your system and ensure that you have allowed space for access to the unit for possible future maintenance.

Fig 1

1. Plumb the inlet & outlet into the existing pipework. Do not put any mechanical load on fittings or use them to support pipes. Observe correct flow direction when connecting pipes, influent and treated water ports are indicated with arrows on the control valve. Plumb the drain line on the control valve and extend it to a floor drain, gully trap or suitable drain. Fix the drain pipe end above the drain fixture to provide at least a 1" wide air gap.

Fig 2

2. To connect the power cable, you need to firstly remove the cover, then remove the drive bracket assembly by pressing up on the drive brackets release tabs and pulling towards you (Fig 1). Feed the cable through the back plate (Fig 2) and connect to PC board (Fig 3). It's important that the bracket is reapplied with a loud snap to ensure the gears meet the drive gear.

Fig 3

3. Press & hold "REGEN" until the motor begins to turn. When the motor stops the screen will appear as in Fig 4. Now, open the inlet valve slowly to allow the softener fill with water. At this point water will discharge to the drain and purge any air from the system. Manually fill the brine tank with 10 litres of water. When the air is purged from the system press "REGEN" once to advance to the next cycle, the screen will appear as in Fig 5. The system is now drawing water from the brine tank. Take the time to observe the water level dropping (which happens very slowly). This is vital as it ensures the system can regenerate and operate correctly. If the system will not draw water from the brine tank ensure the fittings are tight and re-do steps 1 & 2.

Fig 4

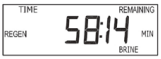

Fig 5

4. Press "REGEN" once, when the motor stops the screen will appear as in Fig 6. Monitor this cycle for a moment to ensure water flows well to drain. Press "REGEN" once, when the motor stops the screen will appear as in Fig 7. At this point the system is refilling the brine tank. Take a moment to ensure the water level rises sufficiently. Press "REGEN" once, when the motor stops the system is in HOME position and ready to offer softened water.

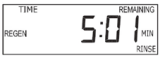

Fig 6

Fig 7

The Principles Of Organics Removal

Dissolved organics in naturally occurring waters are referred to as humates and fulvates.
These are often found in peaty areas and responsible for yellow discoloured water. Organic scavenger systems contain a mix of two medias which capture the organic molecules thus eliminating the colour. The media bed is regenerated with brine.

For deeper cleaning, the media should be treated with caustic soda every 3 months .
Please see table (Page 4) for details.

Controller Features

While in the service position, pressing the "NEXT" button will toggle between the time, current flow rate in litres and the capacity remaining. Press and hold "REGEN" to force an immediate regeneration. When the valve is regenerating it will show a countdown clock for each stage. Press "REGEN" once to skip stages. If for any reason the valve enters error mode press and hold "NEXT" and "REGEN" simultaneously for 3 seconds to reset the valve.

Warranty

This product is guaranteed for the period of one year from the date of purchase against mechanical and/or electrical defects. This guarantee is only valid if the unit has been installed and used in accordance with these instructions.

Specification

Resin Capcity	50 litres	100 litres	150 litres	200 litres	250 litres
Flow Rate	0.78m3/hr	1.56m3/hr	2.34m3/hr	3.12m3/hr	3.90m3/hr
Salt Usage Per Regen	12kg	24kg	36kg	48kg	60kg
Caustic Soda Required Per Resin Clean	1.2kg	2.3kg	3.4kg	4.5kg	5.7kg
Connection size	1″	1″	1″	1″	1″
Vessel Size	10x54	14x65	16x65	21x62	21x62

Dealer Information

Assembled by: _____ **Date:** _____

Installed by: _____ **Date:** _____

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