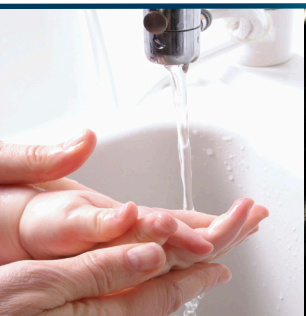
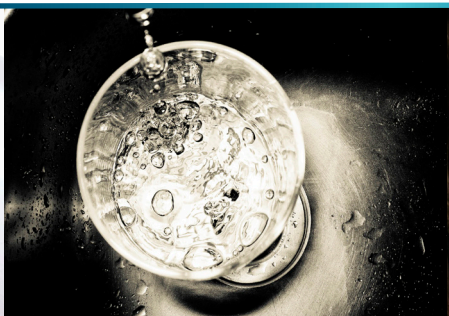
Rethinking Water

Arsenic Reduction Filters

O & M Manual





Introduction

Thank you for purchasing your arsenic reduction filter. 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 and Commissioning 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 left over). 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 the position of the vessel to line up pipework connections, not the position of the valve on the vessel.

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 system 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.

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 1

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 2

3. Press & hold "UP" and "DOWN" simultaneously 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 system fill with water. At this point water will discharge to the drain and purge any air from the system. Ensure that the water runs clear before opening the outlet valve, repeat these steps if necessary.

Fig 3

4. Press "UP" until the motor begins to turn. When the motor stops the screen will appear as in Fig 5. The system is now in a conditioning rinse, monitor this cycle for a moment to ensure water flows well to drain.

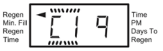


Fig 4

5. Press "UP" until the motor begins to turn and the system will return to Home.

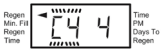


Fig 5

Programming your arsenic reduction filter

1. Press & hold "SET" button - hours will flash. Use "UP" and "DOWN" buttons to set hours
2. Press "SET" button, set minutes and press "SET"
3. Press "SET" and "UP" buttons together and hold until screen changes
4. Set the regen time and press "SET"
5. Set the regen frequency and press "SET"

Controller Features

While in the service position, pressing the "UP" button will toggle between the time and the remaining days to regen. Press & hold "UP" and "DOWN" simultaneously to force an immediate regeneration. When the valve is regenerating it will show a countdown clock for each stage. Press "UP" once to skip stages. If for any reason the system enters error mode, press and hold "SET" & "DOWN" simultaneously to reset the valve control.

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 these instructions.

Specification

Size of Vessel	1044	1054	1252	1354	1465	1665	1865	2162
Arsenic media								
Service flow rate (m3/hr)	1.1	1.1	1.5	1.8	2	2.6	3.2	4.5
Backwash flow rate (m3/hr)	1.3	1.3	1.9	2.2	2.4	3.3	4.2	5.6
Connections (BSP)	¾"	¾"	1"	1"	1"	1"	1¼"	1½"

Dealer Information

Assembled by: _____ **Date:** _____

Installed by: _____ **Date:** _____

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