Start UP

Septic Tank and Re-Circulation Tank

The septic and re-circulation tank shall be inspected prior to start up to:

1. Verify the lid and riser assemblies are watertight. Check for any damaged, water weeping marks, holes or cracks. The system must remain watertight to perform properly.
2. Inspect the outlet effluent filter installation to insure it is installed in accordance with the effluent filter manufacturer's specifications.
3. Inspect the liquid level in the recirculation tank, the liquid should be sufficient to activate the Timer Enable Float.
4. Inspect the location of the float controls. They should be securely attached to the float bracket, free to float without obstructions and the location of the floats should correspond with the float diagram on page 14.

Power Supply

1. Verify the main power supply to the Re-Circulation Panel has properly sized breakers, the proper voltage and is installed in protection water tight conduit.

2. Check the voltage and motor amp draw. If the readings are beyond the limits specified on the pump have an electrician check the main service line feeding the system control panel.

By-Pass Valve

1. Inspect the float by-pass valve insure the Ball in the valve moves freely. Manually start the re-circulation pump and observe the float ball valve, the ball should drop as the liquid in the re-circulation tank drops the effluent returning from the filter pod should flow back into the re-circulation tank and should not flow out the discharge pipe.

Flush the Spray Manifold:

1. At initial Starting-Up of the system remove the end caps from the spray manifold. Operate the re-circ pump by turning the pump control to the "Hand- On" position. Let the pump run for 1 (one) minute then turn the pump control to the "Off" position repeat this procedure three times to flush any construction debris such as dirt or pipe shavings from the spray manifold. Replace the end caps "**Hand Tight**" do not use wrenches or pliers. Re-set the pump control selector switch to the "Auto" position.

2. Using the ball valve located in the manifold supply line adjust the manifold pressure to 20 to 25 PSI.

3. Observe the system as it re-circulates. Visually verify all liquids flows freely thru the system.

Setting the Re-Circulation Pump Control

1. Check the functions of the E-Z Treat Sand Filter control panel**.**
   Control: **Main Control** "On/Off Switch"

   Function: Turns Power ON or OFF

   Control: **System Setting Switch** "Manual ON" and "Auto On"

   Function: "Manual ON" overrides all Float Switches and Time Clock Switches "Auto On" allows for normal operations dictated by the Time Clock and Float Switches.

   Control: **Time Clock "**Minutes On" and "Minutes Off"

Function: Controls run time of re-circulation pump i.e. GPD re-circulated thru media

Control: **High and Low Water Alarm** "Alarm On", "Alarm Auto" and "Alarm Silence".

Function: "Alarm On" will manually turn on the audio/visual alarms. "Alarm Auto" is the normal operational setting and "Alarm Silence" turns off the alarms.

2. Check re-circulation pump. Place the system in the manual mode by turning the re-circulation pump switch to "ON". The re-circulation pump should begin to supply effluent to the spray nozzles in the treatment pod.

Control Panel/Pumps/Alarms

3. Place the system in the normal operating mode by turning the re-circulation pump switch to "AUTO". Verify the Time Clock ON/OFF set the ON/OFF time to match the chart on page 4. SEE: Timer setting instructions below.

4. Verify the accuracy of the system ON/OFF Timer Clock. To accomplish this use a stop watch and verify the length of time the re-circulation pump is OFF then verify the time the re-circulation pump is ON, those times should match the ON/OFF Timer Clock settings in the control panel.

5. Confirm the operation of the visual and audible "HIGH" and "LOW" water alarms. The control has an alarm switch clearly marked Alarm "ON", Alarm "Auto" and Alarm "Silence" Place the Alarm Switch in the "ON" position, you will hear a loud buzzer and see a red flashing light. Move the switch to the Alarm" Silence" position the red light and buzzer will go dormant. Once the alarms have been triggered return all settings to their original position of Alarm "AUTO"

6. Verify the floats are operational by manually raising and lowering the floats to simulate the systems normal operation. Verify proper operation of "High Level Float" by lifting the float while the system Timer Clock is in the "OFF" time mode, the re-circulation pump should turn on over riding the "OFF" timer, the Visual and Audible alarms should activate. Return the float to its normal position the re-circulation pump will turn off. Reset the alarms and manually lower the "Low Water Float" with Timer Clock in the "ON' mode, the re-circulation pump will turn off and the visual/audible alarms will activate. Return the float to the normal position and the re-circulation pump will run. Reset the Alarms.

7. Verify all control breakers are in the ON position and all control switches are in the AUTO position before closing and securing the system.

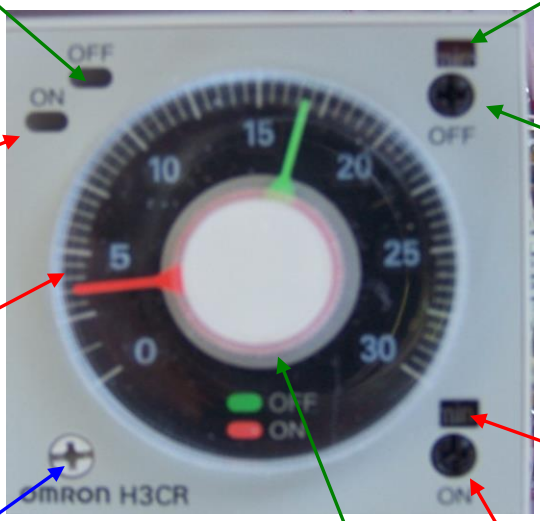
Timer Settings

Design Flow GPD	Min. Septic Tank Sizing	Re-Circ Tank Min. Gal.	Number of Units Mod.#600	Number of Units Mod.#1200	Timer Setting Mod.#600 Min./On	Mod.#600 Min./Off	Timer Setting Mod.#1200 Min./On	Mod.#1200 Min./Off
300	750	300	1	1	2.5	24	2.5	39
400	750	400	1	1	2.5	20	2.5	28
500	900	500	1	1	2.5	16	2.5	22
600	900	600	1	1	2.5	14	2.5	18
700	1000	700	2	1	2.5	21	2.5	15
800	1000	800	2	1	2.5	18	2.5	13
900	1500	900	2	1	2.5	15	2.5	11
1000	1500	1000	2	1	2.5	13	2.5	9
1100	1500	1100	2	1	2.5	12	2.5	8
1200	2000	1200	2	1	2.5	10	2.5	7.5

Re-Circulation Pump Time Clock

Window Will Display **OFF** Sec., Min. or Hr. Rotate **OFF** **Screw** Until Min. Appears in

Light Will Burn **Green** to Indicate Re-Circulation Pump is **OFF**



Light Will Burn **RED** to Indicate Re-Circulation Pump is **ON**

OFF **Screw**,**Seconds**,**Minutes**,**or Hours**

Rotate Dial to Desired Minutes **ON**

Window Will Display **ON** **Sec., Min. or Hr.** Rotate **ON** **Screw** Until Min. Appears in Window

ON **Screw Seconds, Minutes or Hours**

Clock Face Screw Will Change the Clock Face From a Maximum Time of 1.5 Units to a Maximum of 30 Units. Always Set the Clock Face to 30

Rotate Dial to Desired Minutes **OFF**