

Installation Guidelines

Installation of the E-Z Treat System is very simple and can be completed in a single day by a trained and prepared professional contractor. The components provided by E-Z Treat Company are as complete as possible, resulting in less field assembly.

Please review all components and make sure the parts match up with the assembly list. If any parts are missing, please contact E-Z Treat Company at **1-866-753-4770** or your local distributor.

E-Z Treat Company Installation Requirements:

E-Z Treat recommends a pre-construction conference with the system Designer, E-Z Treat Certified Installer, Property Owner Representative and if possible the local Health Department and the Certified Service Company.

- The E-Z Treat System shall be located on the site in compliance with the applicable horizontal setbacks and shall be located to prevent surface/subsurface water infiltration.
- **Drainage from all structures, paved areas and surface natural drainage must be diverted by grading or piping to prevent rain water from saturation the ground around the E-Z Treat system.**
- The E-Z Treat System shall be installed as per E-Z Set Company Instructions, using components approved and/or furnished by E-Z Set Company.
- All Certified E-Z Treat Installation Contractors shall be currently listed with E-Z Treat Company as receiving required continuing education, and shall be certified to proceed with any portion of an installation as local regulations require.
- All tanks required for the E-Z Treat installation shall be supplied and tested by approved tank manufacturers. All tanks shall be tested for water tightness. All tanks, within the system, shall have access brought to grade over tank inlets, outlets and pumping compartments.
- Upon installation, the system shall be tested for piping integrity. Electrical components shall be installed and tested as per local codes. Telemetry system when required shall be installed and tested.
- Prior to the final inspection and start up of the System, the Installer shall check tank structures, effluent filters, float assemblies, Panel and Alarm service, Telemetry, and all other components. Check off lists shall be signed and a copy forwarded to E-Z Treat Company.



Installation Overview

The E-Z Treat System shall be used with properly sized and constructed septic tanks and recirculation tanks. All tanks shall be installed in accordance with the tank manufacturer's specifications and shall be in accordance with local codes. Piping into the inlet and outlet shall be thru a Press-Seal *Cast-A-Seal*. Septic tank outlet shall be fitted with an approved effluent filter (See E-Z Treat Company list of approved filters.)

The septic tank effluent flows to a Recirculation Tank. The Recirculation Tank shall be properly sized and constructed to specifications obtained from E-Z Treat Company. The Recirculation Tank shall be placed in an excavated hole that has been prepared in the same manner as the Septic Tank.

The E-Z Treat filter pod is placed in an excavated hole with a minimum 4-inch bed of small gravel this area must be free of debris and large rocks. The supply and return piping installed from the recirculation tank, to the E-Z Treat Re-Circulation Synthetic Sand Filter, shall have a slight (<5%) fall back to the recirculation tank, enabling complete drainage of the E-Z Treat Sand Filter.

The excavated hole must allow the body of the filter pod to extend to grade level this will allow for proper access into the Filter. In low lying areas or situations where gravity flow back to the recirculation tank is not possible the filter may be placed above natural grade and backfill around the Filter maintaining a gradual slope.

E-Z Treat Sand/Media Filter. Note Bed of Gravel and proper handling harness. Avoid chains or cables that could damage fiberglass filter vessel.

Grade Level Installation



Final grading and landscaping must slope away from all tanks, riser assemblies, and the E-Z Treat Sand/Media Filter to prevent surface water accumulation.



The tank opening, housing the Recirculation Pump and the Float By-Pass Valve, shall have a minimum 24-inch water tight access brought to surface level. Backfill around the Septic Tank, Recirculation Tank and Filter Pod should be done with proper care using fill material free of large rocks and debris. Remember; only backfill after tank and pipe penetrations are water tested.

Backfilled E-Z Treat Filter Pod. Use native soils with no excessive clods, rocks or debris. Be careful to avoid machinery damage. Slope backfill away from the Filter Pod.

Once the E-Z Treat System is installed, a post-construction conference is recommended. This is a final opportunity to familiarize the owner with the system. This onsite pretreatment system requires a Certified Operator. This may be the homeowner, but E-Z Treat Company recommends a qualified professional be contracted for this task.

Re-Circulation Pumps

Caution: Before installing the Re-Circulation Pumps check the voltage and amperage rating of the Re-circulating pump. This information is clearly marked on the pump motor. Make sure the technician wiring the pumps and control is aware of the correct voltage and amperage need for your individual application; remember the control panel is dual rated for 120 or 230 Volts. Three Phase applications are available when specified by an engineer or designer.

PUMP Check Valves

Re-Circulation pumps provided by E-Z Treat come **With** and **Without** built-in check valves. To determine if a built-in check valve is present visually look in the discharge (outlet) of the pump, you will be able to see if a check valve is present.

If a check valve is present **Do Not Install an External Check Valve.**

Simplex Re-Circulation Pump Systems: When installing an E-Z Treat system that is designed with a Simplex Re-Circulation pump “**Do Not**” install a check valve. **Drill a 1/8 inch Hole** in the supply pipe just above the discharge of the pump take care to keep the 1/8 inch hole below the normal operating water level, this will allow the spray manifold in the E-Z Treat Filter to drain and prevent freezing during cold weather conditions.

Duplex Re-Circulation Pump Systems: When installing an E-Z Treat system that is designed with Duplex Re-Circulation pumps “**Always**” install a check valve on each pump. This will prevent by-passing through the idle pump when one pump is activated. **Drill a 1/8 inch Hole** in the supply pipe just above the outlet side of the check valve, this will allow the spray manifold in the E-Z Treat Filter to drain and prevent freezing during cold weather conditions.

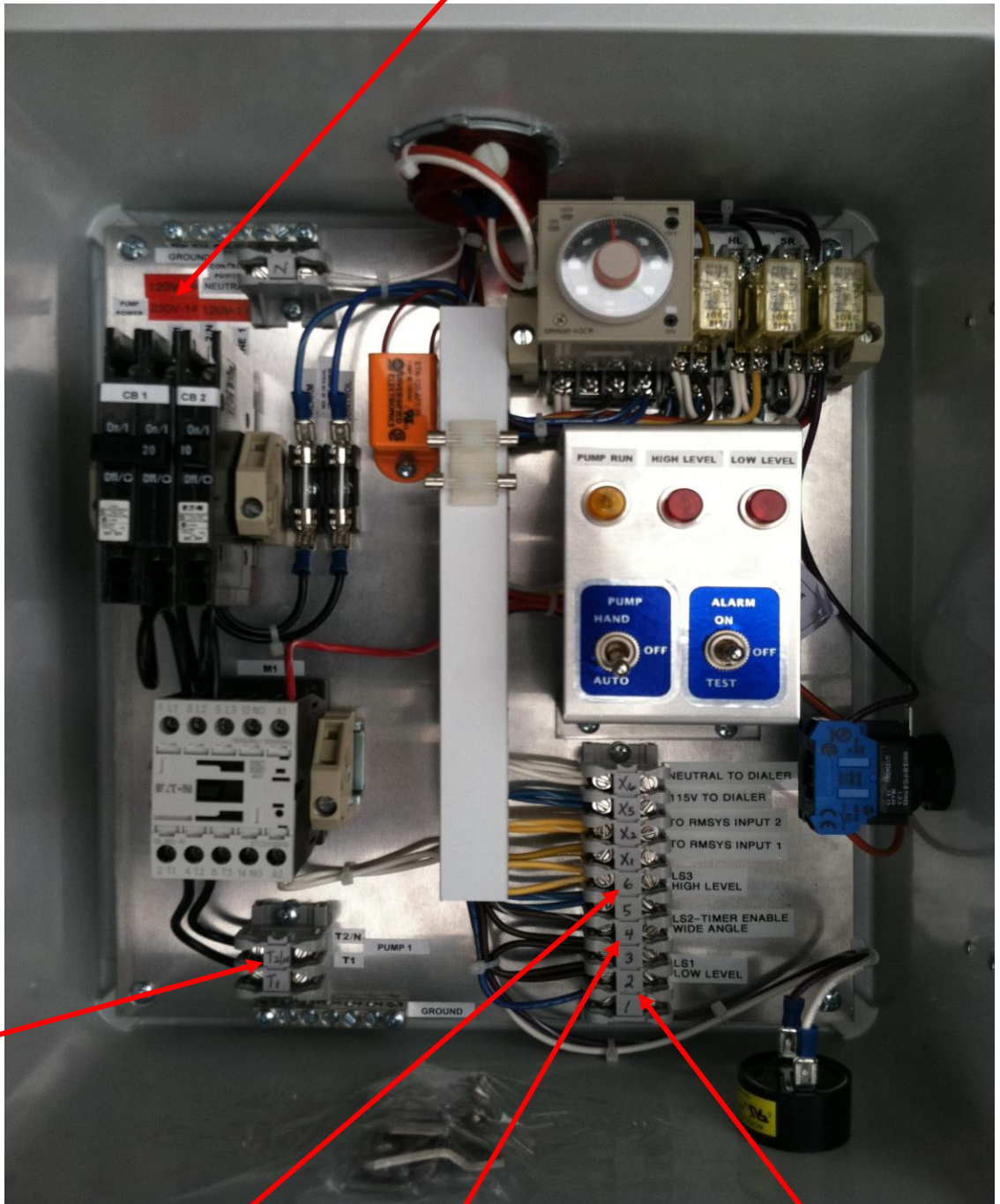
To insure long term trouble free operation of the system **Never Use Plastic Check Valves.**

Setting the Floats:

1. Bottom Float a Normally Open Weighted float which functions as the redundant “OFF” float which provides run dry protection for the Re-circulation pump and activated the “Low Water Alarm”.
2. Middle Float is a Wide Angle Normally Open Weighted float which activates the Re-Circulation Pump “Timer”. **Note: The Middle (Wide Angle) Float is clearly marked with a tag.**
3. Top Float is a Normally Open Weighted Float which activates the “High Water Alarm”.

E-Z Treat Re-Circulation Pump Control

Line Voltage Power (115 v or 230v)
Terminals CB1 – CB2 – Neutral – Ground



High Level Alarm (Top Float) Connects to Terminals #5 and 6

Wide Angle Pump “ON” & “OFF” Timer Activation (Middle Float) Terminals #3 and 4

Low level Alarm (Bottom Float) Connects to Terminals #1 and 2

Re-Circulation Pump Power Source Terminals T1 & T2

Note: “Wiring Diagram is Located on the Control Panel Door”

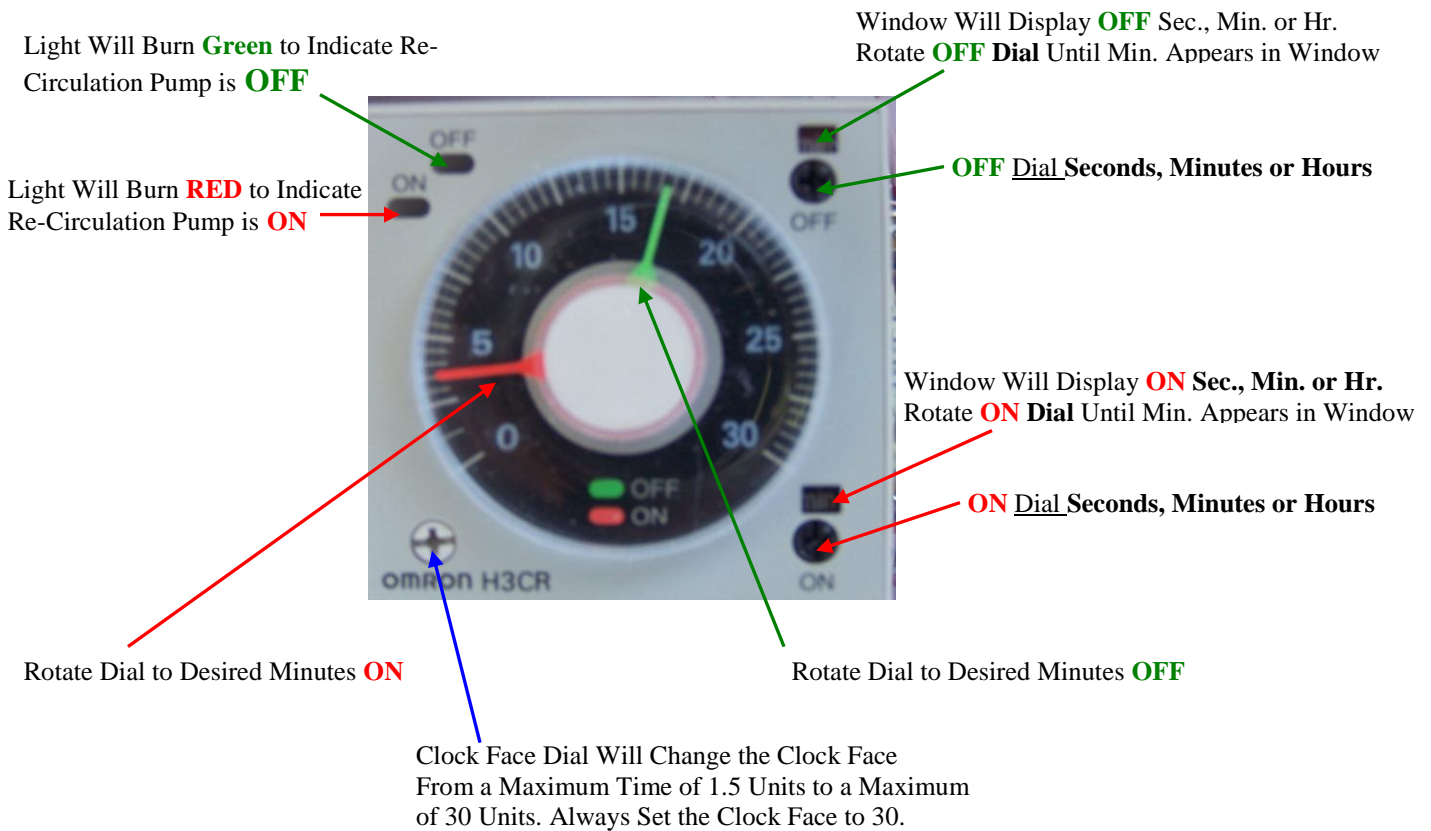
Start Up of E-Z Treatment System:

1. Inspect the liquid level in the re-circulation tank; the liquid level must be high enough for the Middle Float to activate the re-circulation pump timer.
2. Initial system Starting-Up 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 the 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.
3. Inspect the float by-pass valve. 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 sand filter pod should flow back into the re-circulation tank and should not flow out the discharge pipe.

Setting the Re-Circulation Timer:

1. 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.
2. Check the voltage and motor amp draw and record the readings. If the readings are beyond the limits of the NEC recommendations, have an electrician check the main service line feeding the system control panel.
3. Place the system in the normal operating mode by turning the re-circulation pump switch to “AUTO”. Verify the Time Clock ON/OFF settings are the same as set at system start-up. Record those timer settings in the system log.
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.

Re-Circulation Pump Time Clock



4. Observe the system as it re-circulates. Visually verify all flows thru the system.
5. Re-Set the Re-Circulation Pump Control to the “AUTO” position and secure all access covers.