

Commissioning an EARTHSAFE D10

Note: These instructions relate to both the single concrete system and the two tank polymer system.

Ensure that all tanks and chambers are full of water to normal working level.

Note 1: If the tank/s are **not** at operating level, sludge return water may not flow from the primary (septic) tank / chamber back into the aeration tank / chamber and will give false commissioning settings.

2: If the tanks / chambers are **over** full the irrigation pump will operate a number of times until the levels are correct. The high water warning light may be on during this time.

Ensure that there is power from the building to the treatment unit and that both the air pump and the irrigation pump are plugged into their sockets within the control box.

Note: If there is power at the house and it appears that there is **no** power at the air pump etc, the breaker located **inside** the electrical control box (behind the electrical sockets) may be in the off position. Remove the socket face plate (carefully as there are live wires inside) and turn the switch to the “on” position. (see photo)

Once the air pump is operating and the water levels are correct:

1: Turn all of the air leg 15mm ball valves into the “on” position (these run vertically down the **outside** of the chambers).

2: Turn all of the other 15mm ball valves into the “off” position (these are usually positioned on the **inside** of the chambers). This should cause all air from the pump to discharge through the tank floor air legs and the water in the aeration chamber to bubble.

3: Now turn on the horizontal 15mm ball valve above the clarifier (1) (nearest the tank inlet). This operates the “skimmer” positioned just under the surface of the clarifier water and will suck down anything floating on the top of the chamber and return it to the aeration chamber for retreatment. You will be able to see the water jetting from the skimmer outlet. Turn the 15mm ball valve partly off until only a 25% pipe full is flowing.

4: Now turn on the 15mm ball valve positioned vertically on the **inside** of the clarifier (1). This is a sludge return and sucks silt off the floor of the clarifier and returns it into the septic chamber. Carefully adjust this valve until only a small flow (less than 25% of a pipe) is surging back to the septic chamber

5: Now turn on the vertical 15mm ball valve positioned on the **inside** of the clarifier (2) (chamber further away from the tank inlet) and adjust it as for clarifier (1) (**25% of a pipe flow**).

You should now have both 25mm sludge return pipes surging some water back to the septic chamber.

Note: If this is a 2 x tank polymer model you will need to remove the inspection cover **above the septic tank inlet** to see the amount of water returning from each sludge return pipe. They usually have a “tee” on the end of the pipes so that return may be observed. The return water should **not** splash out the top of the tee.

6: The sludge returns and skimmer use up some air pump air to work and you should make sure that there is still plenty of bubbling happening in the aeration chamber.

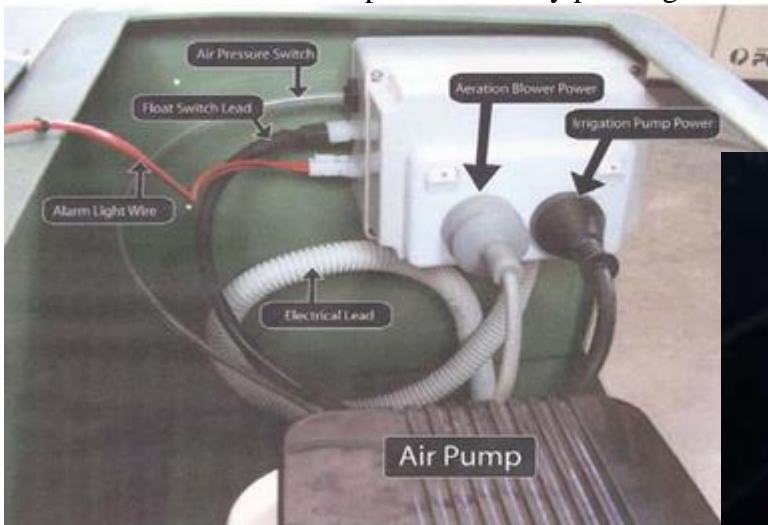
7: The Chlorine tube (90mm vertical situated directly above the central irrigation chamber) should be removed from the tank and loaded with L90 round chlorine tablets (up to ten tablets). This should be done away from the tank opening to minimize the possibility of dropping tablets into the tank. Replace the chlorine tube into its holder and place the 90mm cap on top of it. (This stops chlorine fumes and condensation in the top of the tube)

8: Check that the high water warning float and irrigation pump float are free to operate and are not fouling on anything.

9: Check that the electrical cables inside the main control box are not in a position to vibrate between the inside of the box and the air pump.

10: Secure all tank access points and the control box cover and leave the system running.

Further technical help can be had by phoning **Eco Water on 3865 3775** during normal business hours.



The warning light activates;

If there is low air pressure (the air pump has failed, there is a broken pipe- or the sludge or skimmer control taps are wide open)

If the water level in the central chamber is too high (The irrigation pump has failed- the irrigation line is blocked or kinked – or the pump float or high water warning float is stuck on something)

Valves 1-2-3-4 control aeration distribution to tank

Valve A controls skimmer return

Valves B-C control sludge return to primary tank (two separate lines)

Some pipe circuits are fitted with removable caps to allow cleaning

