EcoDenser Priming Instructions

Priming the System Utilizing a Primer Assembly Kit

- Remove the pump cylinder of the Primer Assembly tank and fill the tank ¾ full with distilled water.
- 2. Replace the pump cylinder, tighten into place and pump the handle to create pressure.



- 3. Close the **Output Valve** on the EcoDenser.
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- Connect the water hose from the Primer Assembly tank to the Return Line Fitting of the EcoDenser.



Make sure the water **Filler Reservoir Valve** is in the OPEN position.



- Take the water hose from the top of the experiment condenser and hold it upwards, above the Filler Reservoir.
- Connect the bottom experiment hose to the Output Valve.





 Squeeze the trigger on the Primer Assembly tank to release pressurized water into the line.



- As water circulates throughout the system, monitor the water level in the Filler
 Reservoir. When the level reaches ½" from the top, close the Filler Reservoir Valve and open the Output Valve. Continue purging the system in order to get any remaining air out.
- 9. Once the system is purged, close the **Output Valve**.
- 10. Disconnect Primer Assembly tank hose from the **Return Line Fitting**.
- 11. Connect the top hose of the experiment condenser to the **Return Line Fitting** of the EcoDenser. Open the **Output Valve** and the **Fill Cup Valve**; then turn on the EcoDenser.

EcoDenser Operation Instructions

Step 1: Connect the condenser water lines Connect the experiment water lines to the Output Valve and the glass condenser Return Line Fitting

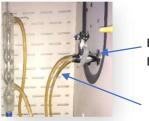


Step 2: Add Water to the EcoDenser – "Priming"

the System

Return

Prior to adding water to the EcoDenser, make sure the experiment hoses are connected.



EcoDenser to Experiment

Experiment back to EcoDenser

Water will need to be added to the EcoDenser upon installation and every time an experiment is disconnected from the unit. <u>Distilled water is preferred for this</u> <u>operation.</u>

IMPORTANT:

- Removing the air bubbles in system is important for proper operation.
- 2. Damage will occur to the pump if the system is run dry.

Make sure the Output Valve and Fill Cup Valve are open





Step 3: Start filling the Fill Cup Assembly slowly until ¾ full.

Allow air to escape (bubbles) from the system. Add water as needed until the system has cleared all air. Never fill the cup more than $\frac{3}{4}$ full at a time.

Note that you may need to intermittently turn the pump assembly "on" and off" until water has gone through the entire loop with no visible bubbles.

The **Fill Cup Assembly** valve may be closed during lengthy experiments to prevent evaporation. The **Output Valve** can be used to regulate the flow of water through the experiment.

WARNING: Do not operate without water. <u>Keep</u> water in reservoir one inch from the top.