



Thank you for choosing the GEO Calcium Reactor. This latest model reflects many changes made over the years to provide a better product. Heavy duty cast construction and quality fittings used throughout ensure years of trouble free service.

GEO Calcium Reactor Pump Installation Instructions

Things you will need to install your pump:

- Eheim 1048 Pump
- Flat Head Screwdriver
- Teflon Tape
- Parts Kit (supplies with reactor)
- Sharp Scissors or Tube Cutters

With your reactor on a safe flat surface open your parts kit and pump. Inspect for damage and verify all of the parts required are present.

Your install kit will consist of the following items:

1. One – black ¼" male pipe thread by ½" straight hose barb fitting
2. One – black 3/8" male pipe thread by ½" hose barb 90 degree hose barb fitting
3. Four – 6-32 pan head screws with washers (shipped threaded into base of reactor)
4. One – ½" inside diameter hose
5. Four – ½" plastic hose clamps

Remove the front cover from the Eheim 1048 pump by gently squeezing either side to release the tabs holding it in place and pulling away from the pump. With the front cover removed the pump base plate will slide forward and off of the pump. Remove the four 6-32 screws and washers from the reactors base plate. Looking at the pumps base plate, you will notice an arrow, this arrow will point towards the back of the reactor. Secure the pumps base plate to the reactors base plate using the four 6-32 screws and washers. Do not over tighten these screws, just snug with the flat head screw driver if all that is needed. With the pumps base plate fastened to the reactors base slide the pump onto its base. You will slide the pump on from the back of the reactor towards the front. The arrow on the base plate should be pointing towards the back of the reactor. With the pump on its base plate install the pumps front cover by gently snapping it in place. Install the black ¼" x ½" hose barb fitting into the pumps out put by threading clockwise. Install the black 3/8"x ½" hose barb fitting into the pumps intake by threading clockwise. *Please note: These fittings are wrapped with Teflon tape from the factory, in most cases you will not need to add additional or replace the tape. Disregard all Eheim pump fittings.* DO NOT OVER TIGHTEN THE FITTINGS; HAND TIGHT IS ALL THAT IS REQUIRED.

With the pump in place and hose barb fittings installed you can now connect the pump to the reactor using the ½" hose provided. The pumps intake hose barb will connect to reactors intake manifold. This is the part attached to the top of your reactor and has the clear blue bubble counter. The pumps output will attach to the fitting found in the lower back of the reaction chamber. These barbs are pre installed. Cut the hose to fit the connection to the pumps intake fitting first. This is easily done by placing one end of the hose on the pumps intake hose barb, and then holding the hose next to the barb on the reactors intake manifold while it is attached to the top of the reactor. Mark the hose and cut. You can now remove the reactors intake manifold and attach it to the hose on the pumps intake. Use the remaining ½" hose to connect the pumps out put fitting to the barb found in the lower back of the reaction chamber. These reactors draw water from the top of the chamber and feed water into the bottom of the chamber. You can now secure the hose to the barbs using the four plastic hose clamps. With the pump in place fill the reactor with tap water to check for leaks.

Feel free to e-mail George at geomweb@aol.com with any questions concerning the set up or maintenance of your new GEO Calcium Reactor. I hope this unit brings you many years of service.