



OWNER'S MANUAL

ECO MHsun

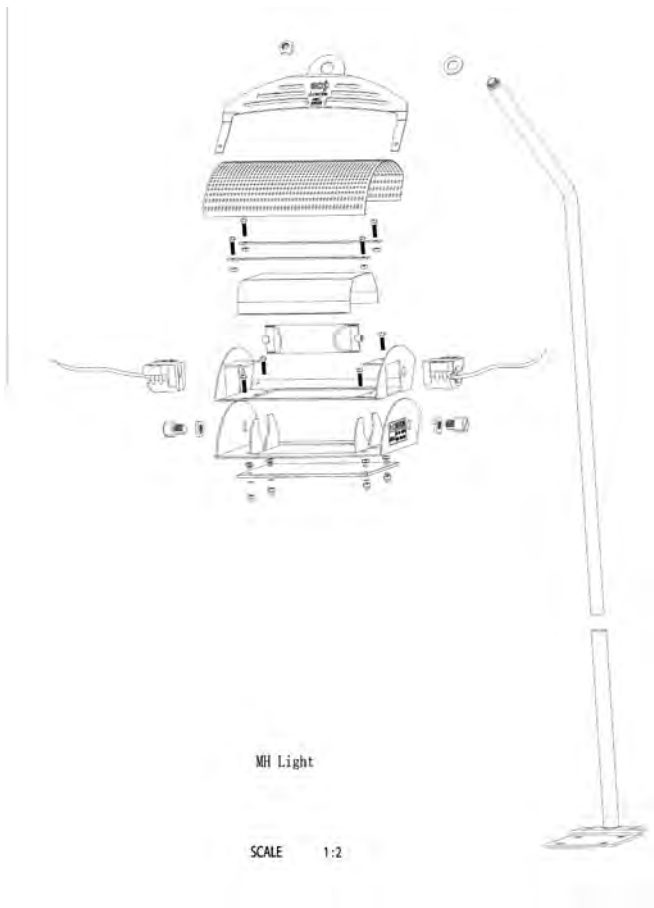




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Each ECO MHsun Kit includes the following components:





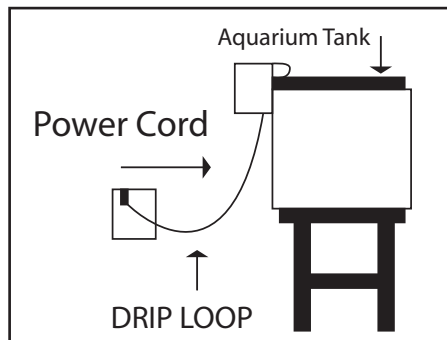
Safety Instructions

IMPORTANT SAFEGUARDS – To avoid injury, basic safety precautions should be observed. PLEASE READ AND FOLLOW ALL SAFETY INSTRUCTIONS BEFORE PROCEEDING.

DANGER – To avoid possible electric shock, special care should be taken in the use of aquarium equipment. For each of the following situations, DO NOT attempt any repairs yourself; return the appliance to an authorized service facility.

1. READ AND OBSERVE ALL THE IMPORTANT NOTICES ON ALL ELECTRICAL APPLIANCES.
2. Do not use an electrical appliance for other than intended use. The use of attachments not recommended or not sold by the appliance manufacturer may cause an unsafe condition.
3. Do not operate any appliance if it has a damaged cord or plug, if it is malfunctioning, if it is dropped or damaged in any manner.
4. Make sure an appliance mounted on a tank is securely installed before operating it. Do not install or store the appliance where it will be exposed to the weather or to temperatures below freezing.

5. To avoid the possibility of the appliance plug or receptacle getting wet, position the aquarium stand and tank to one side of a wall mounted receptacle to prevent water from dripping onto the receptacle or plug. A "drip loop", should be arranged by the user for each cord connecting an aquarium appliance to the receptacle. The "drip loop" is that part of the cord below the level of the receptacle. If the plug or receptacle does get wet, DO NOT unplug the cord.



Disconnect the fuse or circuit breaker that supplies power to the appliance. Then unplug and examine for presence of water in the receptacle.

6. Carefully examine the appliance after installation. It should not be plugged in if there is water on parts not intended to be wet.



7. If the appliance shows any signs of abnormal water leakage, immediately unplug from power source.
8. If the appliance falls into the water, DO NOT reach in for it. First, unplug it from the power source, then retrieve it.
9. The light fixture has a polarized plug (one blade is wider than the other). As a safety feature, this plug will fit in a polarized outlet only one way. If the plug does not fit fully in the outlet, reverse the plug. If it still does not fit, contact a qualified electrician. Never use with an extension cord unless the plug can be fully inserted. DO NOT attempt to defeat this safety feature. – USA units only
10. If an extension cord is necessary, a cord with a proper rating should be used. A cord rated for fewer amperes or watts than the appliance rating may overheat. Care should be taken to arrange the cord so that it will not be tripped over or pulled.
11. Always unplug from outlet when not in use, before putting on or taking off parts, and before cleaning. Never yank the cord to pull the plug out from the outlet. Grasp the plug and pull to disconnect.
12. To avoid injury, do not make contact with moving parts or hot parts such as heaters, reflectors, light bulbs, light fixtures, etc.
13. Close supervision is necessary when any electrical appliances are used by or near children.

Save these instructions. EcoSystem Aquarium® will not be held responsible or liable for damage to persons, appliances, animals and/or aquariums that result from negligent care and failure to follow safety precautions and instructions on the part of the consumer.

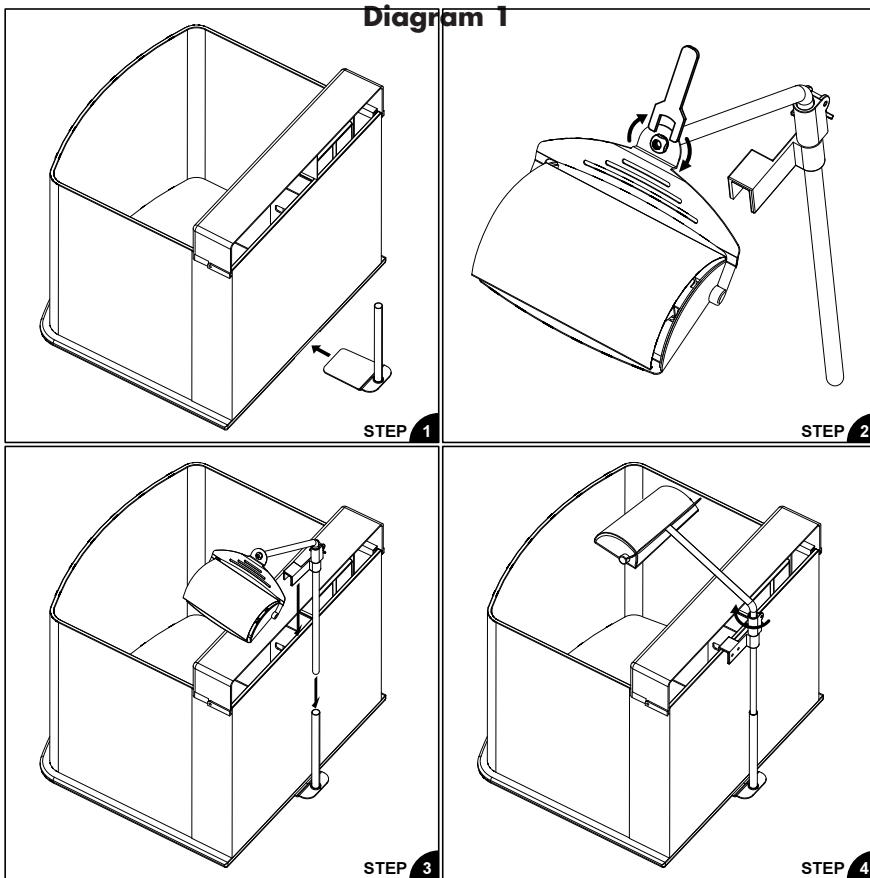


Introduction

EcoSystem Aquarium offers two choices of MH lighting. A 70-watt HQI MH is available for both the small ECO MINI aquarium (14 gallons) and the large ECO MINI (28 gallons).

A 150-watt HQI MH is available only for the large ECO MINI aquarium. MH lighting is an intense light source. Again, please refer to *A PocketGuide™ to Marine Invertebrates* by Dr. Ronald Shimek for tips on selecting the appropriate corals and other invertebrates for your ECO MINI aquarium. The MH light will produce a lot of heat, so the fan must be turned on when the MH light is on, to dissipate heat from the surface of the water. A nano chiller is also recommended when using this light setup up to avoid sudden fluctuations in temperature.

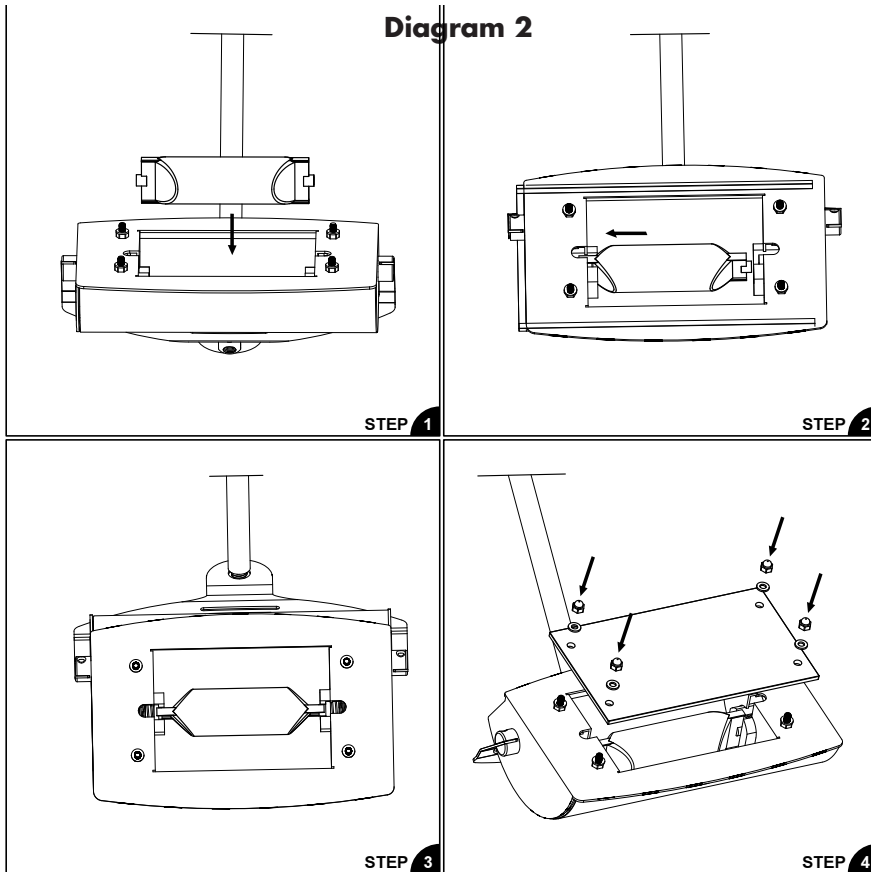
Step 1: Setting up the ECO MHsun Metal Halide Lamp





Step 3: Maintenance

Plan on replacing the metal halide bulbs every 8 months when using an 11 to 12 hour photoperiod per day. Follow the steps in *Diagram 2*. It is important not to change the light spectrum or Kelvin temperature of the bulb. Different spectrum bulbs have different intensities. If a light of a different spectrum is installed, it may have a different intensity that may cause the corals in the aquarium to burn or bleach, which may then lead to their eventual death. This is similar to the analogy of moving corals up and down in the reef aquarium. Corals that require high light intensity will not live (bleach) when placed deep or in the shade, while corals that require low light intensity will not live (burn, then bleach) when placed in higher light intensity. Take care to adjust the height of the light fixture higher up when it is first replaced and then gradually lower the height over an extended period of time. This will help to maintain light intensity relatively constant for corals.





EcoSystem Aquarium

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5. Name and telephone of person to call, should contact be necessary.
6. Reason for return and description of the problem.

Damage occurring during shipment is deemed the responsibility of the carrier, as claims should be made directly with the carrier.

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