

SAFETY INSTRUCTIONS

WARNING

To guard against injury, basic safety precautions should be observed, including the following:

READ AND FOLLOW ALL SAFETY INSTRUCTIONS

DANGER

To avoid possible electric shock, special care should be taken since water is employed in the use of aquarium equipment. For each of the following situations, do not attempt repairs by yourself. Return the appliance to your retailer or discard the appliance.

- If the appliance falls into the water, or water drips onto the unit, DON'T reach for it! First unplug it and then retrieve it. If electrical components of the appliance get wet, unplug the appliance immediately.
- Always unplug appliance from an outlet when not in use, before putting on or taking off parts, and before cleaning. Never yank cord to pull plug from outlet. Grasp the plug fully and pull out to disconnect.
- Carefully examine the appliance after replacement. It should not be plugged in if there is water on parts not intended to be wet.
- Do not operate any appliance if it has a damaged cord or plug, or if it is malfunctioning or has been dropped or damaged in any manner.
- Do not use the aquarium for anything other than its intended use. The use of attachments not recommended or sold by Ecoxotic may cause unsafe conditions.
- Exposing power cords to water may cause electrical short and fire.
- Do not allow water or salt to come in contact with lighting fixture or power cords.
- Only use aquarium with designated stands located in this manual. Failure to do so will void the warranty.
- Warning: This aquarium is constructed of glass. Breakage of glass can lead to dangerous wounds. If glass is broken, do not touch or attempt repair.

SAVE THESE INSTRUCTIONS

GROUND FAULT CIRCUIT INTERRUPTER PROTECTION

To comply with the National Electrical Code (NFPA 70), and to provide additional protection from the risk of shock, this unit MUST be connected to a ground fault circuit interrupter (GFCI) outlet at all times. Do not use extension cords. WARNING – To reduce the risk of electrocution, keep all connections dry and off the ground. Do not touch plug with wet hands.



PREPARATION

The Aquarium

The aquarium uses clear 6mm glass panels fused at the edges to create an aquarium that perfectly accentuates the inhabitants inside while providing unparalleled strength. A glass cover, complete with cutouts for easy removal and power cord clearance, aids in reducing evaporation. It is highly recommended that the glass top be used on the aquarium at all times.

Filtration

Blending into the rear portion of the aquarium, the aquarium uses an integrated filtration system, housing all the critical filtration components vital to the aquarium's health and appearance.

Water is pulled from the main portion of the aquarium through the Surface Skimmer, drawing water from the top of the water column where the majority of waste accumulates in an aquarium. Water passes through a mechanical pre-filter sponge to remove heavy wastes and algae, reducing heavy waste buildup in the biological filtration section, improving water quality.

Following the pre-filter, water enters the aquarium's Protein Skimmer (for use with saltwater systems) where it is blended with air and injected laterally into a fusion cylinder where the micro-air bubbles and waste-laden water are subjected to unprecedented dwell time to produce waste foam. This foam is pushed into the collection cup, completely separating it from the aquarium water where it can be discarded easily.

Water exits the protein skimmer, cascading over the Drip Tray and Filter Pad and filtering out any remaining waste. Water is then distributed in an even pattern through the Drip Plate into the Biological/Chemical Chamber, containing NanoBall biological media and activated carbon. The highly oxygenated water coming directly from the protein skimmer is extremely beneficial to the aerobic bacteria inhabiting the biological media, enhancing the ability of the bacteria to break down harmful ammonia and nitrite quickly. The included activated carbon chemical media will help remove impurities and discoloration in the water. The easy to use carbon packs (part M) should be replaced monthly for best results.

Aquarium Top-Off System

This aquarium system incorporates a ready-to-use top-off system, automatically maintaining a consistent water and salinity level inside the aquarium. Included with the aquarium are two Top-Off containers that can be pre-filled and dropped into the Top-Off section quickly and easily without spilling water or disturbing the inhabitants with a gush of water from a bucket. This Top-Off system also removes the need for guesswork when going on vacation and salinity level fluctuations from overfilling your system with water. The Top-Off system will only add water when the level drops, eliminating the need for minimum/maximum fill lines. as well as providing adequate water movement in the aquarium. Water is distributed into the aquarium through a flexible "Y" nozzle that can be shortened, elongated and positioned in a variety of ways to separate wastes from rocks and corals, suspend organics to be filtered, eliminate "dead zones" and to add further oxygenation by promoting surface agitation of the water surface.



PREPARATION

Aquarium Circulation System

One of the most important aspects of any aquarium is circulation, both for regulating flow through the filtration section and to provide proper water movement in the aquarium. The aquarium uses a flow-adjustable heavy-duty 1500 liter per hour (400gph) submersible pump for circulating water from the filtration section into the aquarium. The flow rate is key to both maximizing the turnover rate of the aquarium (the entire aquarium is filtered 8 times per hour) as well as providing adequate water movement in the aquarium. Water is distributed into the aquarium through a flexible “Y” nozzle that can be shortened, elongated and positioned in a variety of ways to separate wastes from rocks and corals, suspend organics to be filtered, eliminate “dead zones” and to add further oxygenation by promoting surface agitation of the water surface.

Preparing Your Aquarium

The following steps should be performed prior to the addition of water, sand, etc. It is recommended you consult your dealer on the proper types and methods of adding water, substrate and life to your aquarium.

Step 1. Preparing the location of the aquarium

Just like any piece of furniture, placing the aquarium in the home requires some forethought as to the requirements of the aquarium itself and your viewing needs. Ideal locations should have the following:

- a. A solid, level floor capable of supporting a stand and aquarium weighing up to 400 lbs
- b. Located in an area that does not receive direct sunlight
- c. Located in an area that is not in the direct path of people or pets moving through the home
- d. Have direct access to at least two (2) GFCI protected outlets (see safety instructions)
- e. Have easy access to the front and sides of the aquarium for cleaning and ventilation
- f. A base or stand designed for use with aquariums and capable of supporting an aquarium weighing up to 400 lbs

Step 2. Unpacking the aquarium

Before unpacking the aquarium, note any external damage to the box in case shipping damage has occurred and be sure to keep all packaging in the unlikely event the unit needs to be returned.

If damage is noted please contact your dealer or retailer immediately before proceeding.

- a. Remove the packaged Aquarium from the outer carton and carefully cut any packaging straps securing the top and bottom protective covers to the aquarium. Carefully remove the glass top with packaging (held in place by the front corner braces and top cover) and place in a safe area for installation after setup is complete. Remove the top and bottom cardboard covers, and place the aquarium on the stand.
- b. Rinse aquarium with clean freshwater - do not use detergents or soaps. Before assembling aquarium and installing, we highly recommend water testing the aquarium for 12-24 hours. Place aquarium on aquarium stand or on a perfectly flat location and fill with freshwater. Allow aquarium to hold water for 12-24 hours and inspect for leaks or shipping damage (cracks.) If any leaks or cracks are found, please contact your retailer or dealer immediately for replacement.



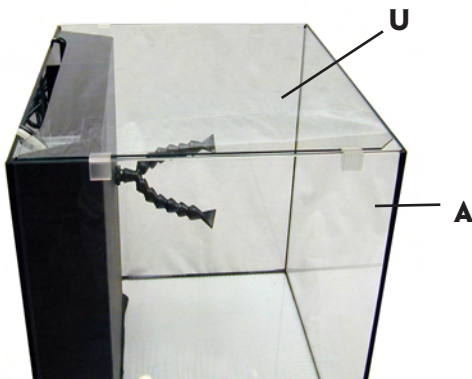
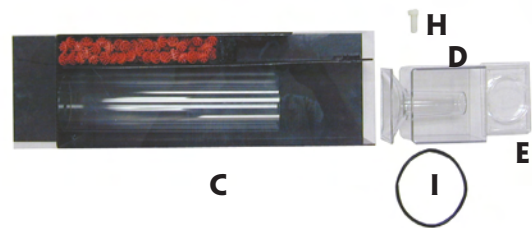
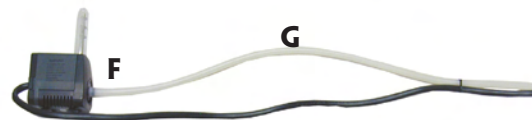
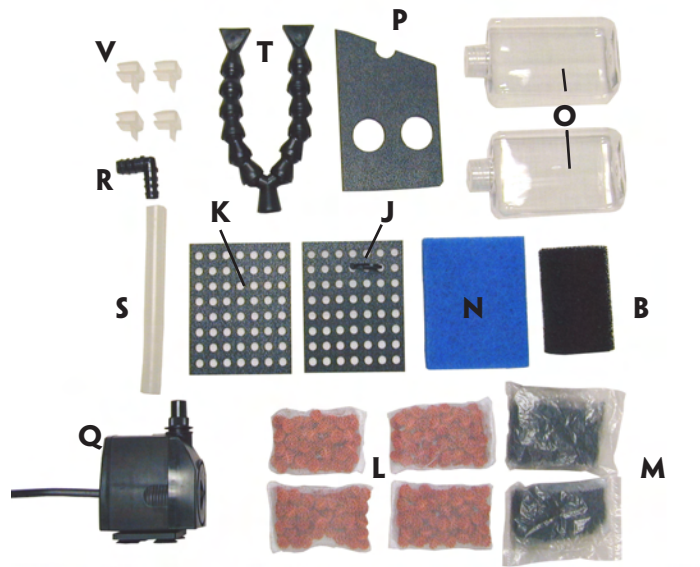
PREPARATION

PREPARATION CONTD

c. Remove protective packaging from the filtration section of the aquarium. Carefully remove all components from the filtration section and inspect for damage.. Be careful not to discard bag containing the suspension clips (V) for the glass top (U). Use the following table and diagram to identify all components. If any parts are damaged or missing, please contact your dealer or distributor immediately.

Part and Quantity

- A Glass Aquarium w/integrated filtration section (1)
- B Surface Skimmer Pre-Filter Sponge (1)
- C Protein Skimmer Body (1)
- D Protein Skimmer Collection Cup (1)
- E Collection Cup Lid (1)
- F Pump for protein skimmer w/lateral injection outlet (1)
- G Airline for protein skimmer pump (1)
- H Collection Cup Height Adjustment Screw (1)
- I Collection Cup Height Adjustment Band (1)
- J Top Drip Plate (with pull loop) (1)
- K Bottom Drip Plate (1)
- L BioBall Filter Media (4 bags)
- M Activated Carbon filter media (2 bags)
- N Filter pad for top Drip Tray (1)
- O Top Off Containers (2)
- P Top Off Plate (1)
- Q Return Pump (1)
- R Return Elbow (1)
- S Return Pump Hose connector (1)
- T Flexible Modular Return "Y" Nozzle (1)
- U Glass Top (1)
- V Glass Top Suspension Clips (4)



ASSEMBLY

d. Once you have identified all the components and made sure they have not been damaged, rinse all components under clean fresh water to remove any dust or residue (do not use any detergents). Most components are pre-assembled with the packaged aquarium, so it is critical that you identify the location of each component and its assembly before removing parts for cleaning. Allow all parts to dry before proceeding with assembly. The pre-filter sponge (B), bioBall bags (L), and Filter Pad (N) can all be rinsed under freshwater as well. For best performance, do not remove bioBalls from the nylon mesh bags they come in. Do not rinse the Activated Carbon (M) until the aquarium has been cycled and is ready for fish, corals, etc. to be added. When rinsing carbon, remove from plastic bag and rinse with freshwater.

Step 3. Assembling your aquarium

Before proceeding with the setup of your aquarium, make sure that the base or stand that you are placing the aquarium on conforms to the requirements in step 1.

- a. Place the cleaned Aquarium onto the aquarium stand. Keep the glass top off and in a safe location throughout the installation. Use a level to ensure that the aquarium is situated evenly.
- b. Place the pre-filter sponge (B) into the pre-filter skimmer chamber as shown (Figure A)
- c. Attach the airline (G) to the air intake connection on protein skimmer pump (F).



FIGURE A

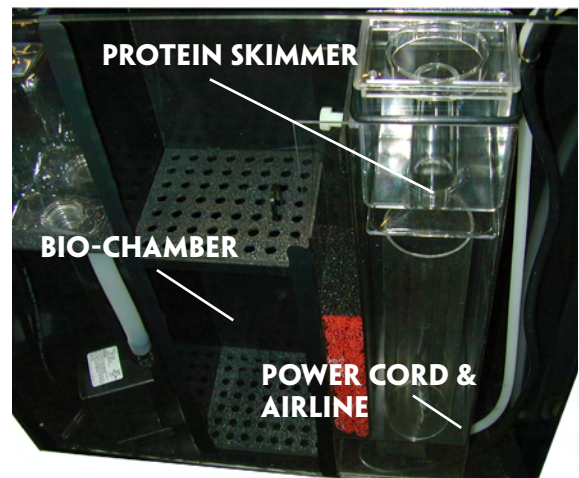


FIGURE B

- d. Attach the protein skimmer pump (F) into base of protein skimmer body (C) and place the skimmer assembly positioned correctly into the protein skimmer chamber of the aquarium (Figure B). It may be necessary to hold the protein skimmer pump in place by gently pulling the power cord upward when placing the protein skimmer into the filtration section. Route the airline and power cord from the pump through the opening at the right-side base of the protein skimmer body and up through the top of the filtration section (Figure B).

ASSEMBLY

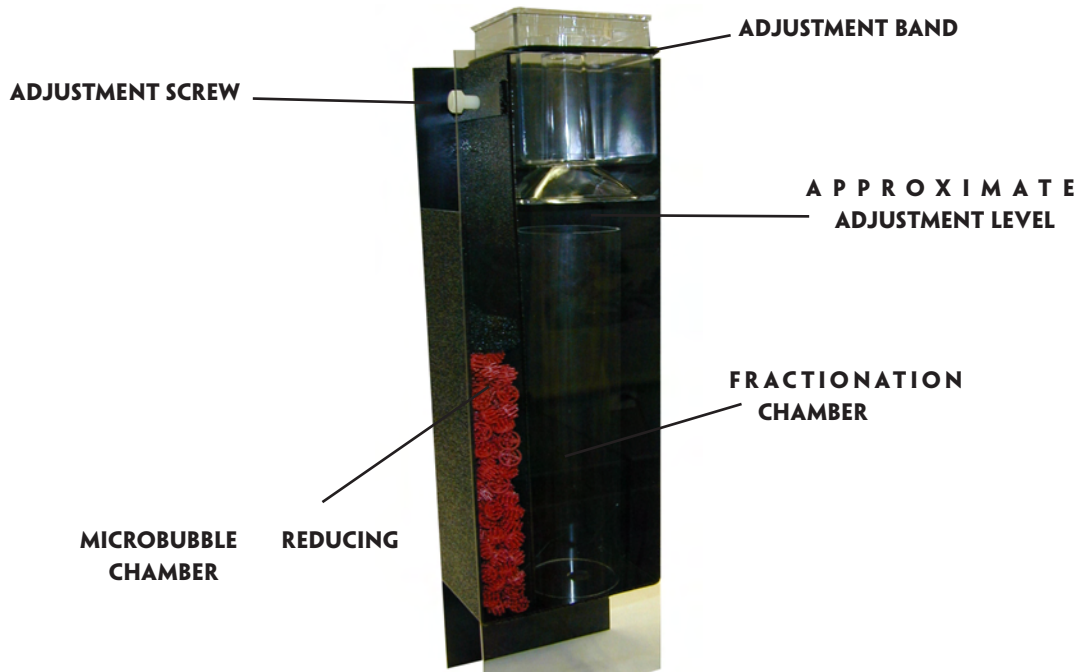


FIGURE C

e. (Note: Protein Skimmer for saltwater use only) Insert the Collection Cup Adjustment screw (H) partially into the receptacle at the top left hand side of the protein skimmer body (C). Place the Collection Cup Height Adjustment band (I) onto the Collection Cup body (D)-This will be used in conjunction with the height adjustment screw to hold the collection cup at a specific height for optimal skimming performance. Place the collection cup lid (E) onto the collection cup (D) and insert into the top of the protein skimmer body so that half of the cup is in the body and half is out (Figure C). Slide the adjustment band down the body of the collection cup until it holds the collection cup at the desired height (which may change once the unit is operational). Tighten the adjustment screw until it secures the collection cup in place. Do not over-tighten the screw as this can damage the aquarium and Collection Cup. Final positioning of the collection cup will occur later when water is flowing through the unit. When filling the aquarium with water the protein skimmer will initially float-remove the collection cup and add water directly into the top of the protein skimmer to weight it down. Once the pump for the protein skimmer is operational, the skimmer will fill to its normal level.

f. Place bottom drip plate (K) onto the support shelves at the base of the biological/chemical chamber (Figure B). Place the enclosed pre-rinsed bags of BioBalls (L) into the Biological/Chemical chamber evenly distributed over the bottom drip plate. Do not remove BioBalls from the nylon mesh bags. The Activated Carbon media bag(s) (M) will be placed on top of the BioBalls after the aquarium has completed the nitrogen cycle. When water is added to the aquarium, the BioBall and activated carbon bags may float initially. This will not affect their functionality in the filtration system. Place the top drip plate (J) onto the support shelves at the top of the biological/chemical chamber and place the filter pad (N) over the drip plate.

ASSEMBLY

g. Attach one end of the return pump hose connector (S) to the outlet of the return pump (Q) and the other end to the return elbow (R). Insert the return elbow with hose and return pump attached into the receptacle in the return area of the aquarium filtration section. It may be necessary to twist the return pump to position it at the bottom of the return area so that it rests flat on the bottom.

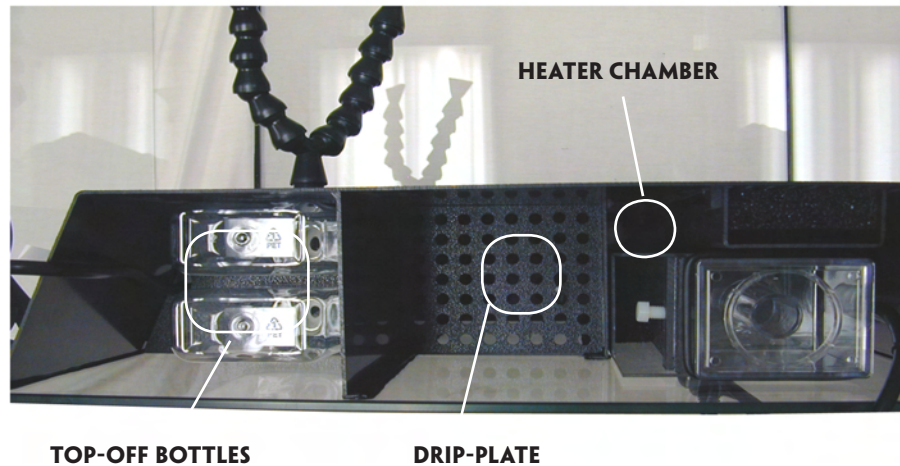
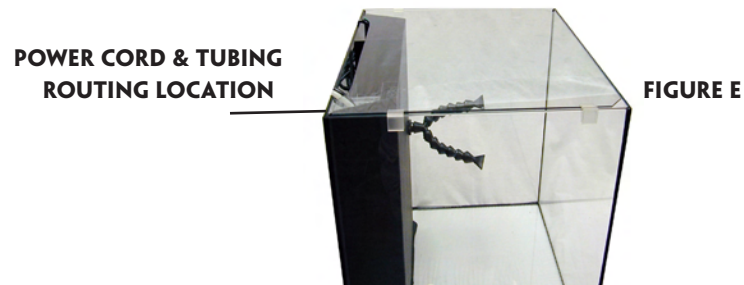


FIGURE D

h. Attach the flexible return nozzle (T) to the return outlet on the inside portion of the aquarium (Figure D & E) by pushing the connection cone firmly over the return outlet. The fit will be fairly tight but will allow the cone portion to twist on the outlet for adjustability. Once the unit is up and running it may be necessary to adjust the nozzle for desired flow patterns, wave action and/or surface agitation.

i. Place the Top Off Plate (P) onto the support shelves positioned over the top of the return pump area. Route the power cord to the return pump through the cutout in the Top Off Plate. The Top Off bottles will be added later when the unit is filled with water.

j. When installing the glass top (U), place each of the 4 suspension clips (V) on the rim of the aquarium so that the resting edge of the clip is facing the inside of the aquarium. Position the clips so they support the glass top evenly over the top of the aquarium (Figure E). Place the glass top on top of the aquarium so that the cutout is facing the filtration section of the aquarium. The power cords for the pumps and airline tubing from the protein skimmer can be routed out the back of the aquarium through the partial cutout in the glass top (Figure E).



ASSEMBLY/OPERATION

Step 4. Preparing the aquarium for use

Before placing the aquarium into operation it is recommended that you fill the unit with freshwater to test the following:

- a. Check the stand to make sure it is stable and still level.
- b. Check the outside of the aquarium for leaks
- c. Plug in both the protein skimmer pump and the return pump to make sure they are operational.

*Note: The protein skimmer will not produce microbubbles in freshwater.

d. Check to make sure water is flowing smoothly through the pre-filter sponge where water enters the filtration section and through the filter pad over the biological/mechanical chamber.

e. If you plan to use a heater with the aquarium, the heater can be placed either in the main portion of the aquarium, or in the filtration section between the protein skimmer and biological/chemical chambers (Figure D). If placing the heater in the filtration section, it is extremely important that the heater be placed only in the designated section as this area will maintain a constant water level at all times. The aquarium will accommodate a heater up to 11.5" long (100-200w UL listed heater recommended). Ensure that the entire heating element is submerged under water in the filtration section.

Congratulations, your aquarium is now ready for use. Please consult your local aquarium supply dealer on the proper setup of your saltwater or freshwater aquarium.

Operation

Filling the aquarium

When filling the aquarium with either saltwater or freshwater, begin by filling the main viewing portion of the aquarium first. As the water level nears the top of the aquarium, the water will begin to cascade into the filtration section through the pre-filter screen and sponge. Once the water level fills the filtration section up to just below the top drip plate (Figure F), stop filling and plug in the protein skimmer and return pumps. The water level within the main viewing portion of the aquarium will stabilize approximately 1" below the top edge of the aquarium. The water level in the filtration section (also referred to as the "sump" section) may begin to drop. Under normal operation the water level in the filtration section will decrease with time due to evaporation and from wastewater removed from the protein skimmer, while the water level in the viewing section will remain constant. Using the Top Off system, however, will help maintain a stable water level in the filtration section. Continue filling the aquarium until the water level in the filtration section again reaches the level of the top off plate and top dip plate.



FIGURE F

OPERATION

Using the Protein Skimmer

Saltwater use: The aquarium's protein skimmer gives you the ultimate control in the foam quality/quantity that is collected. By using the collection cup adjustment screw you can position the collection cup in the ideal position for optimal foam collection. Start by positioning the collection cup in the skimmer so that the bottom edge of the funnel is approximately 1/4" below the water (not foam) level inside the skimmer (Figure F). Initially the protein skimmer may collect large amounts of clear liquid or light colored foam, especially after live rock or sand has been added. It is possible that the skimmer will not produce any foam at all. Typically there is up to a 2-week period for the skimmer to "break in" and begin to collect a consistent foam quality. During the first few months the foam collected will change in quality and quantity as the Solana matures and as specimens are added, so periodic adjustment of the collection cup maybe necessary during this time. The collection cup should be emptied when no more than 1/2 full or at least once per week. Rinse the cup under warm water, being sure to remove any buildup inside the throat or tube inside the cup, as this will inhibit skimming performance

Freshwater use: Although the protein skimmer is designed for use with saltwater tanks, it does add value to any freshwater aquarium. The protein skimmer will not be able to collect foam since the low specific gravity of fresh water does not allow the unit to produce the same microbubbles as in salt water, but the skimmer will add additional aeration to the aquarium and can be attached to a CO2 system for use with freshwater plant aquariums (see your dealer for info).

Using the Top Off System

The aquarium comes with two Top Off containers. With either a freshwater or saltwater system, the water loss from evaporation will always be fresh water, so the Top Off containers should be filled with purified fresh water (Reverse Osmosis water is recommended). The filled containers with cap in place will be inserted top down into the hole in the Top Off Plate (Figure G). Check the container daily to ensure water is still present. When all the water has left the container, replace it with the backup container and refill the used bottle so that it is ready for use. The evaporation rate with the aquarium will vary with the ambient temperature of the home, the humidity level, and with the type of lighting or extra accessories being used in the aquarium, such as pumps. Having the glass top in place will also cut down on the evaporation rate. After a couple of weeks you will know how much time it takes for the aquarium to use a full container of water. It is still important to check the salinity levels on a regular basis due to saltwater loss from the protein skimmer.



WARRANTY

Ecoxotic One-Year Limited Warranty

This limited warranty applies only to products that are manufactured by or for Ecoxotic and can be identified by trade name or logo affixed to it, and sold by an authorized Ecoxotic retailer in the United States to you, the original purchaser of such products ("Products"). Ecoxotic hereby warrants that Products will be free from defects in materials and workmanship for a period of one (1) year from the date of original retail purchase (the "Warranty Period"). This warranty does not apply to any product that is not an Ecoxotic Product.

This warranty does not apply to Products (i) that have been damaged by accident, abuse, misuse or misapplication, improper installation, saltwater corrosion, electrical surges, (ii) that have been modified without the written permission of Ecoxotic or, (iii) for which any Ecoxotic logos have been removed or defaced.

Please contact Ecoxotic if you discover a defect in any Product. In the event that such Product is defective, as determined by Ecoxotic in its sole discretion, Ecoxotic's sole obligation, and your exclusive remedy, shall be for Ecoxotic, at its option, to repair or replace such Product at no charge to you, provided that you (i) return such Product to Ecoxotic during the Warranty Period, and (ii) provide proof of purchase and registration of such Product. If the returned Product is not defective or is returned after the Warranty Period, Ecoxotic shall have no obligation to repair or replace the Product.

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This warranty is not transferable. No person is authorized to change, modify or extend the terms of this warranty in any manner. This warranty is governed by the laws of the State of California, excluding conflicts of laws principles. Ecoxotic reserves the right to make changes, additions and improvements to its products from time to time, and has no obligation to replace the exact same model of Product.

