

INSTALLATION & MAINTENANCE GUIDE

DUAL-LAMP T5 HO LIGHT FIXTURES

Item #	Product Description
420012	Light 20 IN Dual Lamp T5 HO Marine
420138	Light 24 IN Dual Lamp T5 HO Marine
420139	Light 30 IN Dual Lamp T5 HO Marine
420140	Light 36 IN Dual Lamp T5 HO Marine
420141	Light 48 IN Dual Lamp T5 HO Marine
420014	Light 20 IN Dual Lamp T5 HO Fresh
420142	Light 24 IN Dual Lamp T5 HO Fresh
420143	Light 30 IN Dual Lamp T5 HO Fresh
420144	Light 36 IN Dual Lamp T5 HO Fresh
420145	Light 48 IN Dual Lamp T5 HO Fresh



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This symbol indicates “**WARNINGS**” that are essential in order to protect against injury to people or damage to equipment.



This symbol indicates “**NOTES**” that are specific instructions on how to operate, control, adjust or maintain the units.



This symbol indicates “**TIPS**” that are intended to offer helpful advice for a better user experience.

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Thank you for purchasing an AquaticLife™ Light Fixture for use with your aquarium!

We know you value quality and innovation and will be pleased with this product's performance.

We encourage you to take a few minutes to become familiar with this manual and note items that apply to your particular model. For additional information, please visit www.aquaticlife.com.

Your purchase includes a coupon on the side of the box. Save Life Rewards™ point coupons from Aquatic Life products and redeem them for free merchandise at www.aquaticlife.com. This is our way of saying thank you for your loyalty.



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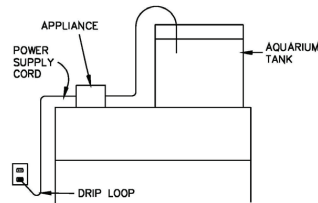
SAFETY INSTRUCTIONS



WARNING

TO GUARD AGAINST INJURY, BASIC PRECAUTIONS SHOULD BE OBSERVED, INCLUDING THE FOLLOWING:

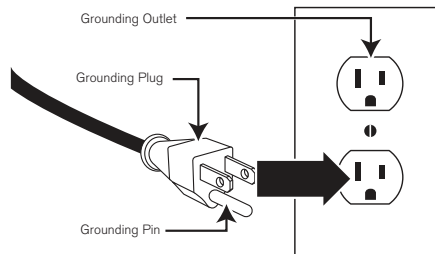
- A) **READ AND FOLLOW ALL SAFETY INSTRUCTIONS.**
- B) **DANGER** – To avoid possible electric shock, special care should be taken since water is employed in the use of aquarium equipment. For each of the following situations, do not attempt repairs by yourself; return the appliance to an authorized service facility for service or discard the appliance:
 - 1) If the appliance falls into the water, DON'T reach for it! First unplug it and then retrieve it. If electrical components of the appliance get wet, unplug the appliance immediately. (Non-immersible equipment only)
 - 2) If the appliance shows any sign of abnormal water leakage, immediately unplug it from the power source. (Immersible equipment only)
 - 3) Carefully examine the appliance after installation. It should not be plugged in if there is water on parts not intended to be wet.
 - 4) 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.
 - 5) To avoid the possibility of the appliance plug or receptacle getting wet, position 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," shown in the figure below, should be arranged by the user for each cord connecting an aquarium appliance to a receptacle. The "drip loop" is that part of the cord below the level of the receptacle, or the connector if an extension cord is used, to prevent water traveling along the cord and coming in contact with the receptacle. If the plug or receptacle does get wet, DON'T 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.
- C) Close supervision is necessary when any appliance is used by or near children.
- D) To avoid injury, do not contact moving parts or hot parts such as heaters, reflectors, lamp bulbs, and the like.
- E) Always unplug an 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 and pull to disconnect.
- F) Do not use an appliance for other than intended use. The use of attachments not recommended or sold by the appliance manufacturer may cause an unsafe condition.
- G) Do not install or store the appliance where it will be exposed to the weather or to temperatures below freezing.
- H) Make sure an appliance mounted on a tank is securely installed before operating it.
- I) Read and observe all the important notices on the appliance.
- J) If an extension cord is necessary, a cord with a proper rating should be used. A cord rated for less 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.
- K) For added safety, the appliance must be plugged into a receptacle controlled by a GFCI (ground fault interrupter) circuit breaker. Device must be properly connected to a grounded three-prong receptacle.
- L) This appliance is intended FOR HOUSEHOLD USE ONLY.
- M) This Light Fixture is required to be used over a covered aquarium. A glass top or protective barrier is required to minimize the fixture's exposure to water.
- N) **SAVE THESE INSTRUCTIONS**



GROUNDING SETUP

This appliance should be grounded to minimize the possibility of electric shock. This appliance is equipped with an electric cord having an equipment grounding conductor and a grounding type plug. The plug must be plugged into an outlet that is installed and grounded in accordance with all appropriate codes and ordinances.

This appliance is for use on a normal 120-volt circuit, and has a grounding plug that looks like the plug illustrated below.



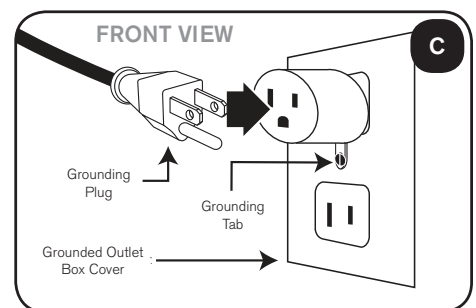
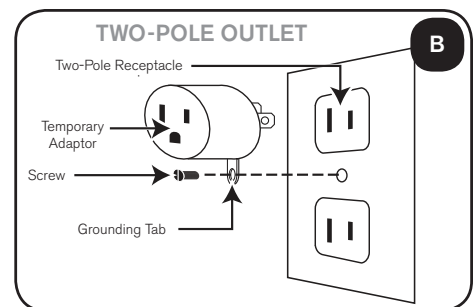
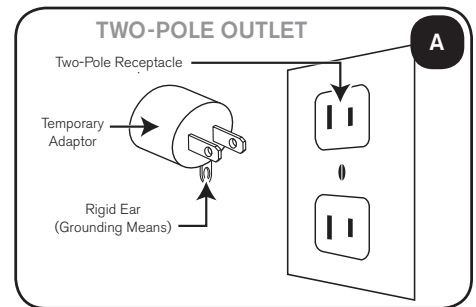
A temporary adaptor which looks like the adaptor illustrated in (A) may be used to connect this plug to a two-pole receptacle as shown in (A) if a grounded outlet is not available.

A temporary adaptor should only be used until a grounded outlet can be installed by a qualified electrician.

GROUNDING INSTALLATION

The green-colored rigid tab extending from the adaptor must be fastened to a permanent ground such as a grounded outlet box.

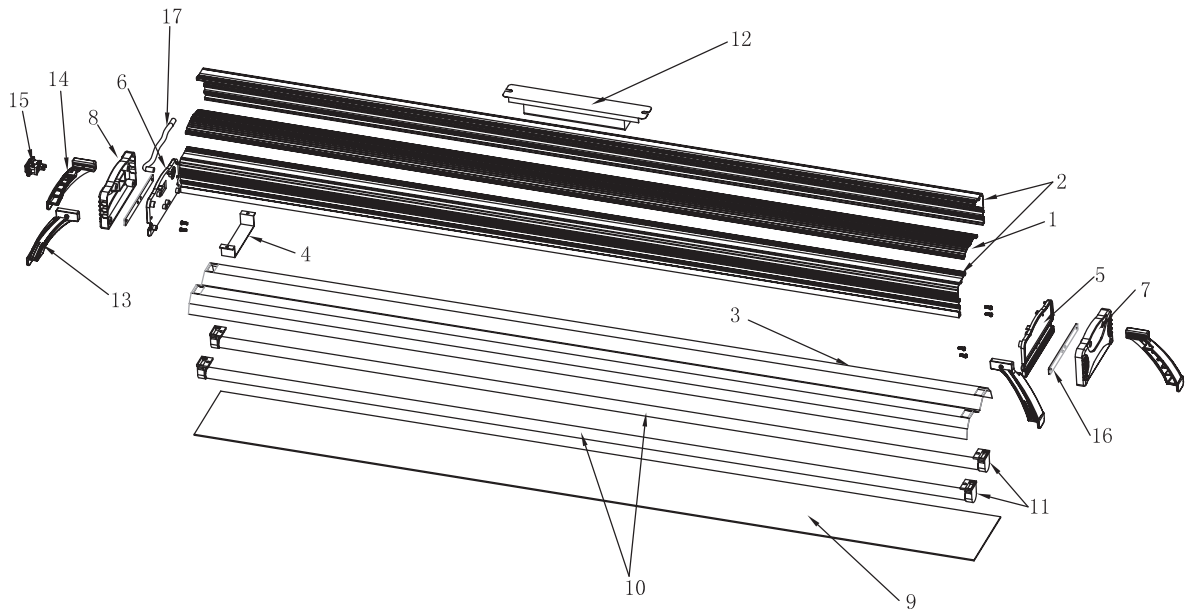
1. Plug temporary adaptor into two-pole outlet. (B)
2. Insert screw through rigid tab on temporary adaptor and into grounded outlet box. (C)



GROUNDING INSTRUCTIONS

THIS APPLIANCE SHOULD BE GROUNDED TO MINIMIZE THE POSSIBILITY OF ELECTRIC SHOCK.

PARTS DIAGRAM



Parts List

Unit Model	20 in	24 in	30 in	36 in	48 in
420/460 nm lamp – Marine Fixture	410218	410039	410039	410041	410043
10,000K lamp – Marine Fixture	410219	410040	410040	410042	410044
Roseate lamp – Freshwater Fixture	410221	410132	410132	410134	410136
6000K lamp – Freshwater Fixture	410220	410113	410113	410133	410135
Aquarium Frame Mounts	470146	470146	470146	470146	470146
Ballast	470020	470020	470020	470071	470072
Metal Attachment	✓	✓	✓	✓	✓
Lens Cover	✓	✓	✓	✓	✓
End Plate	470149 (SOLID LEFT) / 470150 (SWITCH ACCESS RIGHT)				
Installation & Maintenance Guide	✓	✓	✓	✓	✓

Product Specifications

	20 in	24 in	30 in	36 in	48 in
Rated Voltage:	120 Volt AC				
Rated Cycle:	60Hz				
Power Cord	2 Meters				
Power Factor:	0.55	0.55	0.55	0.55	0.59
Dimensions without Frame Mounts: (L x W x H)	20.13 x 4.75 x 2.5 in 51.1 x 12.1 x 6.4 cm	23.88 x 4.75 x 2.5 in 60.7 x 12.1 x 6.4 cm	29.5 x 4.75 x 2.5 in 74.9 x 12.1 x 6.4 cm	35.88 x 4.75 x 2.5 in 91.1 x 12.1 x 6.4 cm	47.63 x 4.75 x 2.5 in 121 x 12.1 x 6.4 cm

DUAL-LAMP T5 HO INSTALLATION

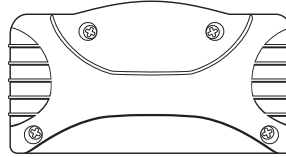
PACKAGING

Tools required for installation:
Philips #2 Screwdriver

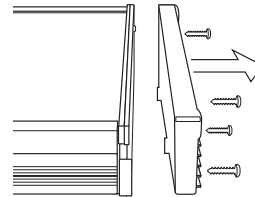


The Aquatic Life Marine Light Fixture is shipped with the T5HO fluorescent lamps already in place; however, the shipping materials will need to be removed prior to operation. Place the light fixture on a surface that will not mar or scratch the fixture.

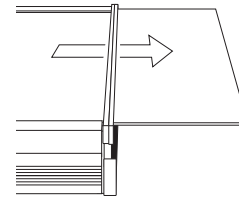
- 1) Remove the four screws from the right End Plate (non power cord side) of the fixture (Philips Screwdriver required).



- 2) After the four screws are removed, pull the End Plate from the fixture.



- 3) Slide the Acrylic Lens Cover out of the fixture.



- 4) Acrylic scratches easily and your new fixture includes a plastic film on the Lens Cover to protect it during shipping. Peel the protective film off both sides of the Acrylic Lens Cover.



TIP: Use a large towel under the fixture while removing the shipping materials to avoid scratching the fixture.



NOTE: The lamps will be packaged under the Lens Cover, do not discard.

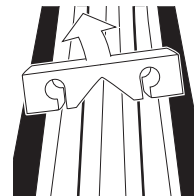


NOTE: DO NOT replace the End Plate until the Aquarium Frame Mounts have been attached.

LAMPS

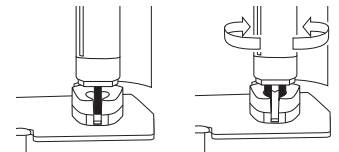
The lamps are packaged in a protective plastic to help eliminate damage during shipping. The lamps also have a protective foam to eliminate damage from shipping.

- 1) Remove the protective foam from the lamps.



- 2) Remove the protective plastic cover from around the lamps.

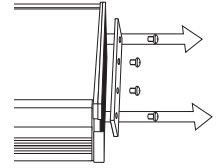
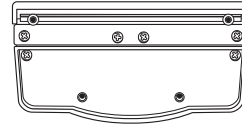
- 3) T5HO lamps use a mini bi-pin connection to make contact with the fixtures sockets. The lamps require that both ends of the lamps be inserted vertically into the sockets and twisted either front to back or back to front. The mini bi-pin connections will now be horizontal in the socket.



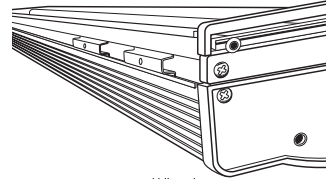
DUAL-LAMP T5 HO INSTALLATION

AQUARIUM FRAME MOUNTS

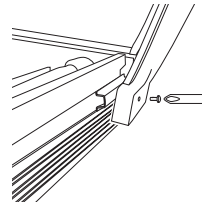
- 1) With the End Plate still off, remove the Metal Attachment by removing the four screws with a Philips Screwdriver.



- 2) Slide the metal anchors into the channel located on the side of the light fixture. Place two anchors per channel; two for the front and two for the back.

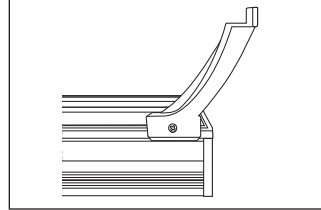


- 3) Place a Mount over the metal anchor and insert a screw through the Mount and into the anchor. Tighten the screw until the anchor pulls against the inside of the channel and secures the Mount to the fixture. Repeat for each Mount.



NOTE: There are two styles of legs included with the fixture. Position the Mounts so that the legs extend beyond the fixture.

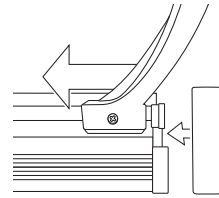
Correct Placement



Incorrect Placement



- 4) Reattach the Metal Attachment.
- 5) Slide the Acrylic Lens Cover back into the track.
- 6) Reattach the End Plate.



SUSPENSION SYSTEM (Optional Accessory, Item # 420147)

The Aquatic Life Dual Lamp Fixture can be hung from overhead supports with the optional suspension hardware. The fixture is equipped with Mounting Points on the housing for easy connection. Refer to the Installation Guide included with the suspension hardware.

POWER

The Aquatic Life Dual Lamp Fixture is equipped with a single power cord. Connect the power cord into a grounded outlet (GFCI). Rock the switch to turn on the light fixture. (Multiple power cords are equipped when connecting multiple fixtures together. Refer to the Multiple Fixture installation guide).

DUAL-LAMP T5 HO INSTALLATION

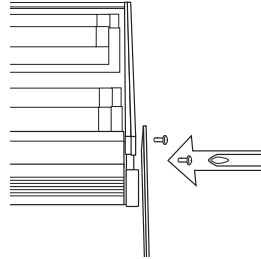
MULTIPLE FIXTURES

Tools required for installation:
Philips #2 Screwdriver

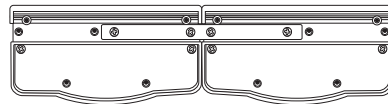
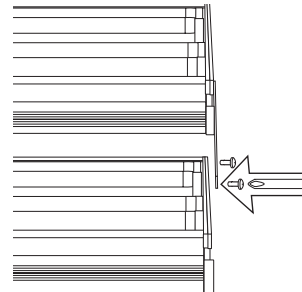


The Aquatic Life Dual Lamp Fixture is able to attach to another Aquatic Life Dual Lamp fixture. Ultimately, three Dual Lamp Light Fixtures can be connected together to form a six lamp fixture.

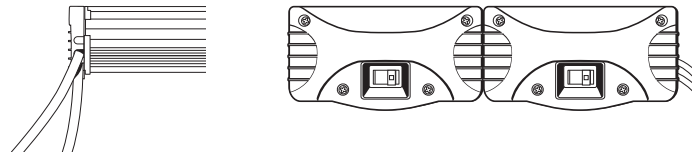
- 1) Remove Left and Right End Plates from both fixtures (Refer to pg. 5).
- 2) Remove Left and Right Metal Attachments from both fixtures (Refer to pg. 6).
- 3) Drive the two left side screws of the Metal Attachment into the right side of the first fixture (non power cord side).



- 4) Drive the two right sides of the Metal Attachment into left side of the second fixture (non power cord side).



- 5) Repeat steps on other end of fixture (power cord side).
- 6) Attach Aquarium Frame Mounts prior to placing End Plates on Fixture.
- 7) After Metal Attachment is connecting both (or three) fixtures, place the left End Plate (power cord side) on the fixture.
- 8) Place second End Plate on the fixture.



NOTE: Prior to connecting multiple light fixtures, remove all packaging materials from the fixtures and insert the lamps into place as described previously. Also remove the Aquarium Frame Mounts.



NOTE: Make sure to route power cord through lower hole in End Plate



NOTE: Some of the removable punches on the plastic End Plate(s) will need to be removed to route the power cords through the End Plate(s). How many will depend on the amount of fixtures connected together.



NOTE: The Aquatic Life Dual Lamp Fixture can have up to three fixtures connected together. If connecting three fixtures, refer to the previous instructions to connect the third fixture.

HOUSING

Unplug the Dual Lamp Light Fixture and wipe the housing with a clean moist/semi dry cloth to remove dust, salt and other debris that may built-up on the fixture.



WARNING: The fixture is not waterproof. Do not spray or submerge the fixture.

LENS COVER

Wipe the Acrylic Lens Cover with fresh water or an acrylic cleaner to maintain peak light transmission. If the Lens Cover is allowed to become dirty, it will reduce the amount of light that is emitted into the aquarium.



TIP: Keep the Acrylic Lens Cover and Glass Cover over the aquarium clean to allow maximum light penetration into the aquarium.

LAMP REPLACEMENT

Depending on the type of marine aquarium inhabitants, the Lamps may need to be replaced every 9 to 18 months. It is best to review the requirements for your animals prior to replacing the Lamps. Consult your local store or supplier for a recommendation for frequency of replacement.

To remove and replace lamps, follow the Installation procedure for Lamps on page 9. The instructions will show how to remove the End Plate and Lens Cover. This will give access to the Lamps.



TIP: Use a large towel under the fixture while replacing the lamps to avoid scratching the fixture.



WARNING: Unplug fixture from power supply and allow cooling for 15 minutes before changing lamps. The fixture generates heat while operating and requires time to cool.

The Lamps are secured in two places, the left and right sockets.

- 1) Gently grasp the ends of the lamp to be removed and rotate the lamp so that the pins are vertical and can be lifted out of the sockets.



NOTE: Both ends of the lamp need to rotate at the same time.

- 2) Insert the new lamp with the lamp pins in a vertical position into the sockets and gently rotate the lamp 90 degrees. The lamp pins should now be in a horizontal position within the sockets.

420/460 nm Lamp: Emits light which produces an identifiable or measurable change when it interacts with matter. Actinic lighting is visibly blue and will need a full spectrum bulb to help offset the color distortion. The light wavelength promotes the growth of Zoaxanthellae algae, essential for the growth and well-being of all photosynthetic corals and invertebrates.

6,000K Lamp: Emits a balanced light that includes peaks in the blue and red spectrums that closely matches the chlorophyll absorption peaks in plants and enhances fish colors.

10,000K Lamp: Emits a spectrum that produces a full range of white light that is beneficial to Marine organisms. The lamp mimics the color of light that can be found in equatorial regions of the world.

Drip Loop: To arrange an electrical cord so it hangs down well below the outlet before running back up again. Any water running down the cord will drip down from the loop, rather than running uphill to enter the outlet.

GFCI: Ground Fault Circuit Interrupter, a device used to measure if any electrical current is “leaking” from the circuit. If a “leak” is determined the GFCI will switch the power off.

Power Factor: A measure of the effectiveness with which an electrical device converts volt-amperes to watts

Nanometer: (nm) A unit in which wavelengths of light are expressed. 1 nm = 0.00000001 meter (1 billionth of a meter).

Roseate Lamp: Emits light that closely matches the chlorophyll absorption peak in the red spectrum to enhance plant growth. Use with 6,000K lamp(s).

REGISTERING YOUR PRODUCT(S) WITH AQUATIC LIFE

When you purchase an Aquatic Life product, you will find a Warranty Registration Card accompanying the product. Please complete this Card and mail it in within 15 days from the date of purchase or register your product online at www.aquaticlife.com. Some Aquatic Life products will include a Serial Number. To validate your warranty, the Serial Number must be included for appropriate products.

Product Serial Numbers

Serial Numbers DO NOT contain the letters "UL", "CUL", "CSA", "EN" or "CE". These letters refer to a US, Canadian and European Standards for that product. If you need help locating the Serial Number for your product, please visit our website at www.aquaticlife.com or call Aquatic Life at 1-888-548-3480.

LIMITED WARRANTY

Aquatic Life, LLC warrants that this Light Fixture (excluding lamps) shall be free from defective electrical components and leaks or cracks due to defects in materials or workmanship for a period of twelve (12) months from the date of purchase. If a defect is shown, Aquatic Life, LLC will, at Aquatic Life's sole discretion, either repair or replace the product without charge. No cash refunds will be made. This warranty is provided solely to the original consumer purchaser of the product and may not be transferred or assigned.

This warranty does not apply to damage resulting from accident, misuse, abuse, lack of reasonable care, failure to follow safety and installation instructions, use of the product with non-standard electrical service, or any other defect not resulting from defects in the electrical components of the product or defects in materials or workmanship. This warranty will not be effective unless and until the Aquatic Life product is shown to have been used in accordance with the safety and installation instructions accompanying the product.

THIS CONSTITUTES AQUATIC LIFE'S ENTIRE WARRANTY AND AQUATIC LIFE MAKES NO OTHER WARRANTIES, WHETHER EXPRESS OR IMPLIED, WITH RESPECT TO THE PRODUCT. AQUATIC LIFE, LLC SPECIFICALLY DISCLAIMS ANY AND ALL IMPLIED WARRANTIES, INCLUDING, WITHOUT LIMITATION, WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE. IF AQUATIC LIFE, LLC CANNOT LAWFULLY DISCLAIM IMPLIED WARRANTIES UNDER THIS LIMITED WARRANTY, ALL SUCH WARRANTIES, INCLUDING WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE ARE LIMITED IN DURATION TO THE DURATION OF THIS WARRANTY.

AQUATIC LIFE IS NOT RESPONSIBLE FOR DIRECT, SPECIAL, INCIDENTAL OR CONSEQUENTIAL DAMAGES RESULTING FROM ANY BREACH OF WARRANTY OR CONDITION, OR UNDER ANY OTHER LEGAL THEORY. AQUATIC LIFE, LLC EXPRESSLY DISCLAIMS ALL ALLEGED DAMAGES FOR LOSS OF MARINE LIFE, PERSONAL INJURY, AND/OR PROPERTY DAMAGE.

Some states and provinces do not allow the exclusion or limitation of incidental or consequential damages or exclusions or limitations on the duration of implied warranties or conditions, so the above limitations or exclusions may not apply to you. This warranty gives you specific legal rights, and you may also have other rights that vary by state or province.

Aquatic Life, LLC shall not have any obligations under this warranty unless the owner notifies Aquatic Life, LLC in writing of any alleged defect(s) within 30 days of discovery of the defect(s). Any notice to Aquatic Life, LLC must be delivered by United States or electronic mail to the following address:

U.S. Mail

Aquatic Life, LLC

2416 W. Victory Blvd, #136

Burbank, CA 91506

Electronic Mail: customersupport@aquaticlife.com

Aquatic Life, LLC shall be allowed a reasonable period of time to investigate any warranty claim and to perform any testing Aquatic Life, LLC deems necessary to determine the cause of the defect. This warranty shall be interpreted under the laws of the State of California.



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