# OPERATING MANUAL

# TURTLE STAND ALONE DISPLAY SYSTEM





# TABLE OF CONTENTS

Important Safeguards
Introduction - Inside the System (pgs. 1-2)
Special Features (pgs. 3-4)
System Specifications (pgs. 5-6)
Adding Filtration Media (pg. 7)
Operation (pgs. 8-9)
Maintenance (pgs. 10-13)
Lamp Change (pgs. 14-15)
<b>Ultraviolet Disinfection Service (pgs. 16-20)</b>
Troubleshooting Guidelines (ngs. 21-22)

#### IMPORTANT SAFEGUARDS

#### **WARNING**

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

#### READ AND FOLLOW ALL SAFETY INSTRUCTIONS

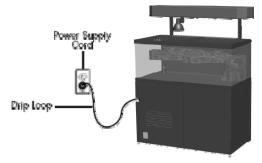
#### **DANGER**

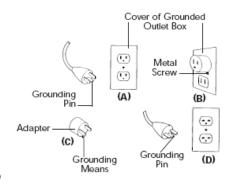
To avoid possible electric shock, special care should be taken in the use of aquarium equipment.

For each of the following situations, do not attempt repairs yourself;

contact an authorized service facility for service.

- 1. A. If an appliance falls into the water, DON'T reach for it! First turn off power at main disconnect and then retrieve it. If electrical components of the appliance get wet, turn off the appliance immediately.
  - B. If the appliance shows any sign of abnormal water leakage, immediately turn off power at main disconnect.
  - C. Carefully examine the appliance after installation. It should not be plugged in if there is water on parts not intended to be wet.
  - D. Do not operate any appliance if it has a damaged cord or plug, or if it is malfunctioning or if it is dropped or damaged in any manner.
  - E. To avoid the possibility of the appliance plug or receptacle getting wet, position unit to one side of a wall mounted receptacle to prevent water from dripping onto the receptacle or plug. A "drip loop", shown in the illustration below should be arranged for each cord connecting 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.
- Close supervision is necessary when any appliance is used by or near children.
- 3. To avoid injury, do not contact moving parts or hot parts such as heaters, reflectors, lamp bulbs, etc.
- 4. 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.
- 5. 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.
- Do not install or store the appliance where it will be exposed to the weather or to temperatures below freezing.
- 7. Make sure appliance is securely installed before operating it.
- 8. Read and observe all the important notices on the appliance.
- 9. If an extension cord is necessary, a cord with proper rating should be used. A cord rated for less ampere 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.
- 10. This appliance should be grounded to minimize the possibility of electric shock. This appliance is equipped with an electric cord that has 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.
- 11. This appliance is for use on a nominal 120 volts circuit, and has a grounding plug that looks like the plug illustrated in (A). A temporary adapter which looks like the adapter illustrated in (B) and (C) may be used to connect this plug to a two pin receptacle as shown in (B) if a grounded outlet is not available. The temporary adapter should be used only until a grounded outlet can be installed by a qualified electrician. The green colored rigid ear (lug and the like) extended from the adapter must be fastened to a permanent ground such as a grounded outlet box.





SAVE THESE INSTRUCTIONS

### **STAND ALONE TURTLE SYSTEM**

The High-Capacity Environment System for Healthier Turtles, Easier Maintenance and Increased Sales.



This manual will provide you with the information you need to successfully operate and maintain your Stand Alone Turtle Display System.

Please read it carefully and keep it for future reference.

Your fully integrated Marineland Stand Alone System is an easy-to-maintain, super-efficient system for displaying aquatic turtles under ideal freshwater conditions. Its high performance mechanical/chemical filtration ensure optimum water quality at all times. Master and electrical access panels ensure fast, trouble free maintenance and service. And the sculpted rock/wood basking platform creates a dynamic visual appeal unmatched by any other system.

# Inside the SYSTEM...

Water is automatically introduced to the Sump at a preset rate. As "new" water enters the system, "old" water is simultaneously removed. This continuous "water change" cycle ensures constant water level, efficient nitrate removal and constant pH. The systems pump directs filtered water to the UltraViolet (UV) Disinfection Unit, the Heating unit and into the display tank.



The UV Disinfection Unit helps stop the spread of bacteria and disease throughout the system. Water enters the UV Housing, surrounding the lamp where it is exposed to UV Light. This exposure destroys the DNA of free swimming bacteria, viruses and algae, preventing them from reproducing.

The system features a Thermostatically Controlled Heating Unit. It can be preset to the temperature (within a range of 70° / 80°F) required by your individual system. A thermometer strip is provided with every display system.

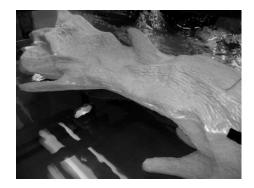
Water uniformly flows into each display tank, exiting via the Bi-Level Skimmer. The Skimmer draws water and floating debris from both the lower and surface levels to ensure uniform water circulation.

Water is directed from the tanks to the Filtration Module. Solid waste is mechanically trapped by the Pre-Filter Pad and filter sleeve of the heavy duty Carbon Filter Pack contained within the Filter Media Tray. The Carbon Filter is packed with Black Diamond Premium Activated carbon for chemical filtration... efficiently adsorbing dissolved organic compounds such as phenols and tannins.

# SPECIAL FEATURES

# Sculpted Rock/Wood Basking Platform with Scenic Backdrop:

Creates a dynamic visual appeal unmatched by any other system.



#### High Output 5000°K UVB Fluorescent Lighting

Energy-efficient overhead lamps ensure vivid, accurate color.

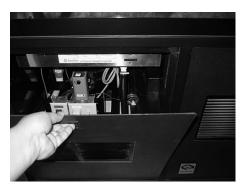
#### **Radiant Basking Lamp**

Producing both heat and light, this incandescent 50-75 watt lamp maintains ideal basking conditions for your turtle population.



#### Front, Rear, and Side Access Panels

Designed to ensure easy access to Filtration module, UV Disinfection unit, Heater unit and Junction Box.



#### **Sump Replenishment Float Valve**

Adds water to Sump when Sump water level drops below ideal operational levels. During daily operation Sump is automatically replenished by the float valve located within the sump to keep water level under control.



# SPECIAL FEATURES cont.

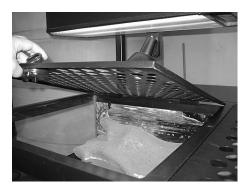
#### **Custom Bi-Level Skimmer**

Draws returning water and floating debris from both the bottom and surface levels to ensure uniform water processing.



#### **Lockable Tank Lids**

Lids allow easy tank access with locks.



# **SYSTEM Specifications**

#### STAND ALONE AQUATIC TURTLE DISPLAY SYSTEM

**MECHANICAL** (approximate):

Size: 48 1/2" L x 24" W x 66H

Shipping Weight: 400 lbs (approx.)

System Gallon Capacity: 50 Gallons (approx.)

**ELECTRIC:** 

ETL listed for cord-connected installation.

Voltage: 115 VAC / 60Hz

Current: 12 AMPS

**FILTRATION:** 

Mechanical Filter: Course Pad, Pre-Filter Pad

Chemical: Black Diamond Activated Carbon.

UV Treatment: UV Treatment: Aqua Ultrafine DW-300; 50,000 uWs/cm^2, @4,000 hrs. (1 each)

"NEW" WATER FROM TREATED WATER SUPPLY:

Flow Rate: 2 gallons per hour

Float Valves (1 per sump)

**CIRCULATION/FILTRATION PUMP:** 

Pump: 4-MDQX-SC

Display tank turns per hour (TPH): 8 TPH minimum

**HEATER:** 

1000 watt, titanium heater; UL listed Thermostat Controller, UL listed; Temperature Range: 50-

130° F

GFCI protected

**LIGHTING:** 

High output 5000°K UVB Fluorescent Lighting

Radiant 50-75 watt Basking Lamp

**MATERIALS OF CONSTRUCTION:** 

Tanks- Glass

Frames – Powder Coated, Cold-Galvanized

**Tubular Steel** 

Misc. Panels & Covers: Expanded PVC, ABS,

Polypropylene

BUYER SUPPLIED CONNECTIONS FOR INSTALLATION:

**Electrical Supply:** 

Cord-connected; 115 VAC, 60 Hz, 15 AMP GFCI-protected outlet recommended

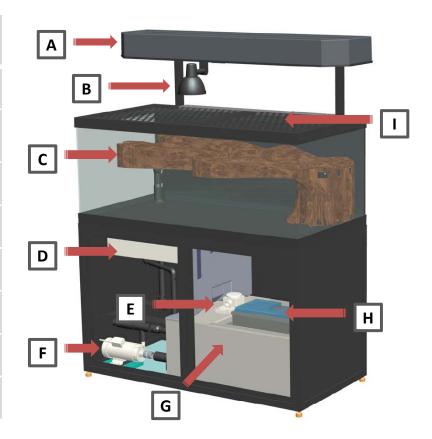
Treated Water Supply: 2 GPH, regulated to 25

**PSIG** 

Drain: 1" pipe, At or below grade, 30' run

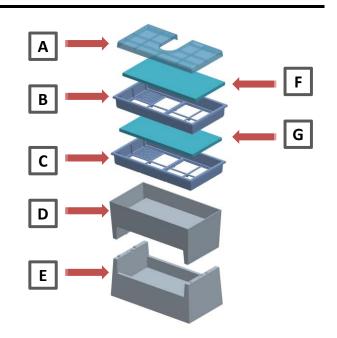
## Stand Alone Turtle Display Exploded View

А	Canopy with High Output 5000°K UVB Fluorescent Lighting
В	Radiant 50-75 watt Basking Lamp
С	Simulated Rock/Wood Basking Lamp
D	UV Disinfection Unit
Е	1000 watt, Titanium Heater
F	4-MD Circulation Pump
G	Sump
Н	Filtration Module
I	Lockable Tank Lids



### Filtration Module Exploded View

Α	Assembly Cover
В	Upper Media Tray
С	Lower Media Tray
D	Upper Housing
Е	Lower Housing
F	Pre-Filter Pad
G	Carbon Filter Pack



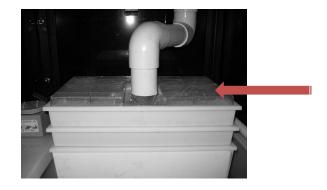
### **ADDING FILTRATION MEDIA**

Prior to system startup, it is necessary to install filtration media. Follow the few easy steps outlined below to get your system ready for operation. System should be allowed to operate with mechanical and chemical filtration media. No biological filtration is need, (BIO-Wheel) for aquatic turtle display.

1. Remove front filtration access panel



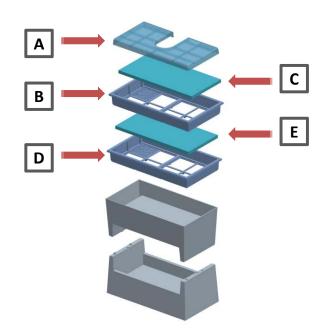
2. Remove clear Assembly Cover (A)



- 3. Lift out Upper Filter Media Tray with Pre-Filter Pad inside and set aside (B and C)
- 4. Unwrap Carbon Filter Pack and Place inside Lower Filter Media Tray (D and E)

**Note:** Before installing, be sure to rinse Carbon Filter Pack thoroughly in cold water (at sink) until water runs clear





- 5. Replace Lower Filter Media Tray (D and E) with Carbon Filter Pack inside
- 6. Replace Upper Filter Media Tray (B and C) with Pre-Filter Pad inside
- 7. Replace clear Assembly Cover (A)
- 8. Replace Front Access Panel.

# **OPERATION**

When media is in place, follow the steps below to get your system up and running. Consult exploded view (pg. 7) for additional clarification.

#### Startup

1. Manually fill Display Tank to level of overflow inside Bi-Level Skimmer and allow it to fill the sump.

Note: fill tank slowly to make sure you do not over fill.





2. **If connected to a floor drain:** Open New Water Supply valve. Check drip emitter (shown) for slow trickle of water into Sump.



#### Note:

A Float Valve is located within the sump to keep water level under control. Overflow are also located in Sumps to help the system perform automatic water changes.



### **OPERATION** cont...

3. Activate Master Switch.



**Note:** After system has operated for five minutes, Sump water level will momentarily drop. Refill Sump to "Fill To This Line" label.

4. Adjust Thermostat to desired temperature. Check temperature after approximately 8 hours and make any necessary adjustments.



- 5. Allow system to operate with mechanical and chemical filtration media (Pre-Filter Pad and Carbon Filter Pack) for a period of 24 hours. Be sure to inspect areas near pump, UV and other components for leaks.
- 6. Adjust water flow nozzles in display tanks to ensure optimum circulation.

# **MAINTENANCE**

To ensure optimum operational efficiency, routine maintenance must be performed. The procedures listed below are neither difficult nor time consuming. They will keep your system clean and your fish healthy. Failure to follow these simple maintenance steps will adversely affect system performance and could lead to premature failure of some components. We recommend setting up a maintenance log to track procedure completion. Note: *For assistance or questions please call technical support at 1-800-576-6277* 

#### **Daily or As NEEDED**

#### Clean or Replace Pre-Filter Pad (recommended daily)

A clogged filter pad overflows and will not collect waste. Uncollected waste is returned to the aquarium and can severely reduce system efficiency.

#### To replace a Pre-Filter Pad:

- 1. Remove clear Assembly Cover. **Note:** Have a bucket or large plastic pan ready to catch spills from removed pad.
- 2. Lift out used pad.
- 3. Rinse or replace with new pad (MZ0180-Blue Pre-Filter Pad or MZ0181-White Coarse Pre-Filter Pad.
- 4. Replace clear Assembly Cover.

#### Replace Carbon Filter Pack (recommended weekly)

#### To replace a Carbon Filter Pack:

1. Remove clear Assembly Cover.

**Note:** Have a bucket or large plastic pan ready to catch spills from removed trays, pad and pack.

- 2. Lift out Upper Filter Tray with Pre-Filter pad.
- 3. Set Upper Filter Tray aside. Lift out lower Filter Media Tray with Carbon Filter Pack.
- 4. Replace Carbon Filter Pack (MZ0175) and rinse out Filter Tray before replacing. Note: Before installing, be sure to rinse Carbon Filter Pack thoroughly in cold water (at sink) until water runs clear.

## **MAINTENANCE** cont...

#### **As NEEDED**

#### **Check Water Pump Operation**

Observe flow of water to the Filter Module. Make sure that water flow is unhindered. If flow interruption is evident, check Pump Intake Strainer (in Sump) for obstructions. If clogged, shut off system, remove Strainer and clean. If flow interruption is still evident and no obstructions are found, consult Troubleshooting Guidelines section in this manual.

#### **Inspect Tanks for Algae Growth**

Algae spores enter the system naturally via tank inhabitants and light allows them to grow. Although your system's UV Sterilizer eliminates the majority of algae spores, the more light you have, the greater the potential for some algae growth. To remove algae, simply wipe inside tank surface and false bottom with an aquarium safe cloth, algae scraper or blue filter pad.

**NEVER** use soap or metal scouring pads. Maintain a separate cloth only for the tanks. It should be kept clean and isolated from other departments so that it does not get contaminated by multiple task use.

#### Check Sump Water Level (recommended daily)

Correct water level is designated by the "Fill To This Line" Label located on the side of the BIO-Wheel Module. If necessary, add water to the sumps via the Sump Float valve located in each sump to keep water level under control.

Note: Overflows are also located in Sumps to help the system perform automatic water changes.

Check Temperature: Recommended: 78-80°F

#### Check Drip Emitter and Float Valve

It's the job of the drip emitter and Float Valve to regulate the amount of new water introduced to your MaRS system. Because the Drip Emitter and Float Valve are vital to optimal operation, it is necessary to Check both each week if possible to ensure proper function. Emitter water flow should be slow and steady. Reduced flow indicates the Drip Emitter should be cleaned or replaced.

**CAUTION:** Never operate the system with the Drip Emitter removed. This results in too much water passing through the system, which can cause water temperature fluctuations. It can also diminish chlorine removal effectiveness of the Carbon Pack.

A **Float Valve** is located within the sump to keep water level under control.

# MAINTENANCE cont...

#### As NEEDED

#### Check UV "Lamp Out" Indicator Light

The "Lamp Out" Indicator Light is located on the UV Cover. When lit, it indicates the UV Lamp is operating. See Service section for replacement instructions.



#### Wipe Down All Exterior Casing Surfaces

**NEVER** use chemicals, soap, detergents or harsh abrasives on any part of the system. Do not use cleaners inside or near the tanks at any time.

#### **At Least Every Two Weeks**

#### **Custom Bi-Level Skimmer**

Draws returning water and floating debris from both the bottom and surface levels to ensure uniform water processing. **To Clean:** Unscrew top cover, remove and simply wipe inside surface with an aquarium safe cloth, algae scraper or blue filter pad









## MAINTENANCE cont...

#### Six Month or AS NEEDED

#### **UV lamps and O-rings Change**

It's recommend that the UV lamps and O-rings are serviced at Six Month Intervals. Marineland network of field service technicians can provide maintenance, call us at 800-576-6277 if needed.

SERVICING ITEMS NEEDED			
2- UV LAMP	MZ0061		
3- UV REPLACEMENT O-RINGS	MZ0041		
4- UV STERILIZER SERVICING KIT	MZ0017		

#### **Clean Titanium Heater Housing**

Reach into sump and scrub Housing. Clean with brush or scrubber pad.

### Fluorescent Lamps Change

To ensure maximum illumination and color reflection, the unit comes equipped with fluorescent lamps that we recommend to be replaced with the same lamp type for proper operation. To replace them with "Cool White" or other lamps of lesser quality will greatly lessen lighting intensity and overall effect.

- 1. Unplug light power cord from appropriate outlet (labeled) NEVER change lamps on fixture while plugged in.
- 2. Carefully Remove Lamp Covers Push up, lower out.





3. Remove Center Bracket.



- 4. Remove front fluorescent lamp. Gently twist 90° and push backward and out from mounted station slots. Discard (*according to established environmental procedure*).
- 5. Remove rear fluorescent lamp. Gently twist 90° and push backward and out from mounted station slots. Discard.

WARNING: DO NOT attempt to remove white Access Housing from mounting. To do so may cause electric shock and severe injury.

- 7. Replace discarded lamps with new lamps. Gently insert ends into slots and push up and forward or up and back until lamp fits securely in place.
- 8. Plug unit back in. and replace
- 9. Replace Lamp Covers and Center Bracket.

# **Basking Lamp Change**

To provide essential heat and light for turtles, the Turtle Display comes equipped with 50-75 watt/R30 incandescent basking lamp. We recommend that they be replaced with the same lamp type. To replace them with other lamps of lesser quality will greatly lessen lighting intensity and overall effect.



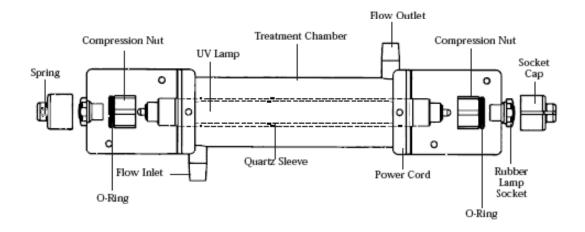
- 1. Unplug light power cord from appropriate outlet. NEVER change fixture while plugged in. Allow lights to cool before proceeding.
- 2. Carefully unscrew and remove Basking Lamp. Discard.
- 3. Replace discarded Lamp with new 50-75 watt/R30 lamp. Gently screw into place.
- 4. Plug unit back in.

# **UV SERVICE**

We strongly recommend that all servicing for your system be performed by a qualified technician or trained associate.

For service, call: (800) 576-6277

#### **Ultra Violet Disinfection Unit**



#### **IMPORTANT:**

To prolong the life of the UV Disinfection Unit and avoid leaving fingerprints on the UV Lamp, we strongly recommend that you wear cotton gloves at all times during servicing of UV Disinfection Unit.

Never look directly into UV Lamp while in operation...eye injury may occur.

Never restore power while UV Lamp is separated from Treatment Chamber. Skin damage and/or injury may result.

Always make sure hands are absolutely dry and if possible gloved before servicing equipment.

#### **Every Six Months:**

#### **Clean UV Disinfection Unit Quartz Sleeve**

The Quartz Sleeve will develop a layer of scum on its surface which can reduce UV Lamp effectiveness. Scum should be cleaned off on a regular basis.

When performing the six-month UV Lamp service, always clean Quartz Sleeve.

Note: We strongly recommend that all servicing of the UV Disinfection Unit be performed by a qualified technician or trained associate. If you or your staff are not familiar with aquatic filtration systems design and installation, call the

MaRS Technical Support division at 800-576-6277 (7a.m. – 5p.m. Monday – Friday).

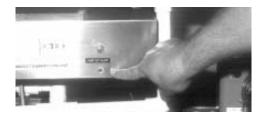
#### **Replace UV Disinfection Unit Lamp**

The UV Lamp has a useful service life of about six months. After this time – whether it continues to appear functional or not – it must be replaced.

Note: If the UV "Lamp Out" Indicator Light is not lit. It's recommended that a service is scheduled to change the UV lamp immediately.

See service section (next page) for replacement instructions.

Note: The UV "Lamp Out" Indicator Light is located on the UV Cover



#### **UV Disinfection Unit O-Ring:**

The O-rings should be replaced each year, (recommended every six months with UV lamp service). Always clean and lubricate O-Ring with a very thin coating of silicone lubricant before inserting into section of threaded Compression Nut.

#### To Clean Quartz Sleeve:

- 1. Turn off Master Switch. Allow UV unit to drain (3-5 minutes).
- 2. Remove Cover.
- 3. Unscrew both threaded Socket Caps from Treatment Chamber ends. Gently disconnect UV Lamp from Rubber Lamp Sockets and carefully remove UV lamp from treatment Chamber, sliding it through from one end to the other. Carefully set aside.
- 4. Unscrew and remove both threaded Compression Nuts. Grasp one end of Quartz Sleeve and gently draw it from Treatment Chamber.

**CAUTION:** Quartz Sleeves are very fragile. Handle with care to prevent breaking or chipping.

If Quartz Sleeve breaks during service and a replacement is not readily available, close the UV Inlet Valve. Unplug UV. Do not replace UV Lamp until new Sleeve is acquired. Turn on Master Switch (system will operate without UV Lamp). When new Quartz Sleeve is acquired, follow installation procedure. Be sure to open UV Inlet and Outlet Valves...and plug UV Power Cord into proper receptacle.

- 5. Wash Quartz Sleeve with mild soap and hot water. Rinse thoroughly with hot water. **Note:** For heavier deposits, we recommend cleaning with CLR. Gently wipe sleeve with clean cloth before reinstalling.
- 6. Working from one end of Treatment Chamber, carefully insert clean Quartz Sleeve through stainless steel nipple and into Treatment Chamber. Sleeve should protrude an equal distance from each end.
- 7. Before installing Compression Nuts, remove and clean O-Rings. Then lubricate each with a very thin coating of silicon lubricant. Reinstall O-Rings.

**Note:** O-Rings should be replaced each year.

- 8. Install Compression Nut at one end. Finger tighten while holding opposite end of Quartz Sleeve.
- 9. Install remaining Compression Nut. Hand tighten (firmly) both Compression Nuts. **CAUTION:** Do not **OVER TIGHTEN** Compression Nuts. This can fracture ends of Quartz Sleeve. After hand tightening Compression Nut, release it one half turn to avoid fracture.
- 10. Carefully reinsert UV Lamp into open Quartz Sleeve and push it about 2-3 inches out beyond the opposite Compression Nut.
- 11. Insert lamp base into spring equipped Rubber Lamp Socket (see diagram), sliding "boot" portion over end of lamp. Push until you feel a firm, "bottomed out" connection.

  Note: Make sure "boot" does not fold under.
- 12. Connect opposite lamp base to remaining Rubber Lamp Socket.
- 13. Once Rubber Lamp Sockets are attached to the UV Lamp at both ends, position Rubber Lamp Sockets inside Socket caps. Making sure that Rubber Lamp Sockets are seated securely, join Socket Caps to threaded ends of Compression Nuts and finger tighten.
- 14. Replace Cover.
- 15. Turn on Master Switch. Inspect Discharge Hose for leaks. Replace Service Panel.

#### **UV Disinfection Unit Lamp**

The UV Lamp has a useful service life of about 6 months (or as dictated by "Lamp Out" Indicator Light). After this time – whether it continues to appear functional or not – it loses intensity and must be replaced. When changing UV Lamp, always clean Quartz Sleeve.

#### To replace UV Lamp:

- 1. Turn off Master Switch. Allow UV unit to drain (3-5 minutes).
- 2. Remove Cover (unscrew outer nuts).
- 3. Unscrew both threaded Socket Caps from Treatment Chamber ends. Gently disconnect UV Lamp from Rubber Lamp Sockets and carefully remove UV lamp from treatment Chamber, sliding it through from one end to the other. Discard.
- 4. Remove Quartz Sleeve. Clean and reinstall (as directed in previous instructions).
- 5. Carefully insert new UV Lamp into open Quartz Sleeve and push it about 2-3 inches out beyond the opposite Compression Nut.
- 6. Insert lamp base into spring equipped Rubber Lamp Socket (see diagram), sliding "boot" portion over end of lamp. Push until you feel a firm, "bottomed out" connection.

  Note: Make sure "boot" does not fold under.
- 7. Connect opposite lamp base to remaining Rubber Lamp Socket.
- 8. Once Rubber Lamp Sockets are attached to the UV Lamp at both ends, position Rubber Lamp Sockets inside Socket caps. Making sure that Rubber Lamp Sockets are seated securely, join Socket Caps to threaded ends of Compression Nuts and finger tighten.
- 9. Replace Cover.
- 10. Turn on Master Switch. Inspect unit for leaks. Replace Service Panel.

### TROUBLESHOOTING GUIDELINES

For system technical support or to schedule a service, call the MaRS Technical Support Division: **(800) 576-6277** 

#### If entire system abruptly shuts down...

- Reset circuit breaker.
- Make sure Master Switch is turned on.
- Check Pump Intake Strainer in Sump for obstructions.

#### If water turns yellow or odors develop...

• Replace Carbon Filter Cartridge.

#### If UV Light goes out...

- Confirm that UV power cord is plugged into appropriate outlet.
- Replace UV Lamp. If problem persists after lamp is replaced, call for Service.

#### If water temperature is too low or too high...

• *Check* Thermostat setting.

NOTE: Thermostat reading may differ from measured Display Tank temperature...adjust thermostat as required and monitor Display Tank temperature with thermometer, allowing 3-4 hours for temperature to stabilize before checking again.

- Make sure power cord to Heating Unit is plugged into proper outlet.
- Call for service if Heating Unit is malfunctioning.

#### If large amounts of air bubbles are evident in display tanks...

- *Check* water level in Sump. If below indicated ideal level, add water by pushing down on the Float Valve bulb (AQ75522) and check frequently.
- *Inspect* "new" water entry into Sump. If water is not trickling into Sump, make sure Hose Bibs are open.
- Make sure Pump Intake Strainer is fitted firmly in place.
- Call for service if problem persists.

#### If Replacement Water flow is greatly reduced or stopped...

• Check water level in Sump. If below standpipe, add water via Float Valve until water level is at or near normal operating level.

#### If fluorescent lamps will not light...

- Make sure lights are plugged into proper outlet.
- Inspect Lamps for burnout. Turn Off power and change if necessary.
- Make sure lamps are inserted into the fixture properly.
- Call for service if problem persists.



#### LIMITED WARRANTY

Marineland warrants their systems for one year against defects in materials or workmanship. This warranty applies only to the system and does not cover water quality, live product, replacement parts or maintenance supplies.

If your system is found to be defective - and has not been modified, damaged or misused – call Marineland Commercial Aquariums (toll free) at (800) 576-6277 or fax us at (805) 517-7198. All calls received during regular business hours (8am - 5pm, Pacific Time) will be responded to within 24 hours. Please have your manual and the system serial number ready.

In most cases, the problem will be resolved by a simple maintenance procedure, recommendation or repair authorization. Upon authorization, and in instances where outside repair or replacement of parts is necessary, Marineland will absorb all appropriate costs.

Damage or injuries resulting from negligence, misuse or user modification are not covered by this warranty. Incidental or consequential damages are specifically excluded.

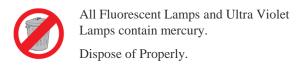
- \* This warranty gives you specific legal rights. You may also have other rights which vary from state to state.
- \* Because some states do not allow the exclusion of incidental or consequential damages, this exclusion may not apply to you.

# **CUSTOMER SERVICE**

For emergency problems with this system, call the MaRS Customer Service, Technical Support at 800-576-6277

For non-emergency problems or questions please call the above number from 7a.m. – 5p.m. Monday – Friday.

CONSUMABLES ITEMS				
1- PRE-FILTER PAD (BLUE)	MZ0180			
2- PRE-FILTER PAD (WHITE COARSE, OPTIONAL)	MZ0181			
2- CARBON FILTER PACK	MZ0175			
SERVICING ITEMS				
2- UV LAMP	MZ0061			
3- UV REPLACEMENT O-RINGS	MZ0041			
4- UV STERILIZER SERVICING KIT	MZ0017			



Z090610 2/09



A Division of The United Pet Group · Moorpark, CA 93021