**LIMITED WARRANTY**

Within one year from the date of original purchase, Marineland Aquarium Products will repair or replace, at its option, any Emperor Filter System which is deemed defective in workmanship or materials.

Please return the unit, together with proof of date of purchase, to your local dealer or send unit (postage paid) to:

**Marineland Aquarium Products**
6100 Condor Drive, Moorpark, CA 93021

Damage or injuries resulting from negligence or misuse are not covered by these warranties. Incidental or consequential damages are specifically excluded*. These warranties give 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.

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Marineland, The Emperor and Emperor 280 are listed by Underwriters Laboratories to ensure that they meet stringent U.S. and Canadian safety requirements.

Marineland, The Emperor, BIO-Wheel, Black Diamond, White Diamond, Diamond Blend and BIO-Pump are trademarks of AQUARIA, Inc.

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**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; return the appliance to an authorized service facility for service or discard the appliance.

1. **A.** 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.
2. **B.** If the appliance shows any sign of abnormal water leakage, immediately unplug from the power source.
3. **C.** Carefully examine the appliance after installation. It should not be plugged in if there is water on parts not intended to be wet.
4. **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.
5. **E.** 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 dripping onto the receptacle or plug. A “drip loop”, shown in the Figure at right 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.

2. 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.
6. Do not install or store the appliance where it will be exposed to the weather or to temperatures below freezing.
7. Make sure an appliance mounted on a tank 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 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.
10. This appliance has polarized plugs (one blade is wider than the other). As a safety feature, the plugs 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 plug can be fully inserted. Do not attempt to defeat this safety feature.

**SAVE THESE INSTRUCTIONS**
Welcome to the world, the art, the experience of fishkeeping.

Each year, thousands of new fishkeepers discover the natural wonder of aquariums. Fishkeeping provides them, and now you, the unique opportunity to not only observe another world, but to create it as well. In the process, you'll learn about aquatic animals and observe their behavior first hand. And there is nothing quite like an aquarium to generate an appreciation and respect for our environment.

Fun, easy and instructive, an aquarium is a singularly beautiful, always fascinating addition to any home or office decor...a welcome source of entertainment, education and relaxation for the entire family.

**Fish As Pets**

Think of your fish as pets and you'll agree they deserve the best care and attention you can provide. They rely on you to keep their environment healthy. A healthy aquarium is relatively easy to achieve and maintain, but it will not happen by itself...it depends on you.

In rivers, lakes and oceans, water is cleansed and filtered naturally. In an aquarium, things are different. In order to keep aquarium water clean and healthy, you must help. This means taking care not to overcrowd the tank or overfeed the fish. It means changing the water regularly, cleaning the gravel bed and providing the proper filtration.

Emperor is the proper filtration...and more. In fact, Emperor is all the filtration you need.
All the Power, all the Filtration You Need.

EMPEROR™ Filter Systems

Total, balanced aquarium filtration is the key to maintaining a healthy aquarium environment. Emperor advanced systems technology effectively and efficiently provides all three necessary filtration elements - mechanical, chemical, and most importantly, biological - for optimum performance.

Total 3-Stage Filtration Efficiency

**Mechanical Filtration** traps solid debris like uneaten food and fish waste.

**Chemical Filtration** uses media (activated carbon) to adsorb (attract and hold) dissolved pollutants which can cause discoloration and odor.

**Biological Filtration** is the most critical kind of filtration. It depends on a culture of beneficial oxygen-breathing bacteria to eliminate toxic ammonia and nitrite that accumulate in aquarium water. The bacteria culture biologically changes the ammonia and nitrite into nitrate, which is removed with once-a-month partial water changes.

**The Heavy Duty Emperor Filter Cartridge** provides superior mechanical and chemical filtration - twice the amount of activated carbon filtration and 45% more mechanical filter area. Dense polyfibers trap larger quantities of dirt and unsightly, unhealthy solid waste. For chemical filtration, each cartridge is packed with Black Diamond Premium Activated Carbon...the highest grade there is.

**The Refillable Media Containers** can hold an additional four ounces each of Black Diamond Premium Activated Carbon, White Diamond Ammonia Neutralizing Crystals or Diamond Blend. White Diamond removes up to four times more deadly ammonia than other brands. Diamond Blend combines the purifying power of Black Diamond with the protective, ammonia-adsorbing action of White Diamond, outperforming other mixes by as much as 4 to 1. Both are ideal for maximizing Emperor’s pollution removal capacity.

**The patented BIO-Wheel®** is the undisputed best when it comes to biological filtration. Better than frames or foams or fluidized beds. Better than UGF’s and other submerged biomedia. Years of continuing laboratory tests and field evaluation prove it.
Superior BIO-Wheel Performance
As the spray-bar driven BIO-Wheel turns, it contacts water and air...providing the bacteria with the oxygen they need to grow. Because it is a wet/dry biological filter, BIO-Wheel provides bacteria with as much as 30,000 times more oxygen than any underwater biological filtration. More oxygen means more bacteria working many times harder (and many times faster) to keep your tank ammonia free and sparkling.

IMPORTANT: Slow or irregular BIO-Wheel rotation is normal. A BIO-Wheel rotating at any speed is removing ammonia and nitrite. There is no reason to replace a BIO-Wheel unless it is damaged. If your BIO-Wheel fails to rotate or stops completely, consult the Troubleshooting section of this manual. Always remove BIO-Wheels before adding any medication. Antibiotics can destroy the beneficial bioculture. Keep BIO-Wheels exposed to air and reinstall after treatment is complete.

Revolutionary Two Pump Design
The Emperor Filter Systems feature not one pump (as in ordinary power filters), but two separate water pumps. The Flow Pump directs water through the entire multi-stage filtration system. The BIO-Pump pressurizes and sends a stream of prefiltered, oxygen-rich water through the spray bars to power-drive the BIO-Wheel. And...the Emperor's unique design allows the BIO-Pump to continue powering the BIO-Wheels even when Flow Pump output is reduced (for feeding or maintenance) by the convenient One-Touch Flow Control.

BEFORE YOU BEGIN...
When creating a new aquarium environment, patience is the first key to success. Allow your system to operate for at least 24 hours before adding fish. Then begin with a few fish, adding more fish gradually over a 4-6 week period. This allows the BIO-Wheel to establish a beneficial bacteria culture for peak efficiency.

And Remember...
Choose your aquarium location carefully.
Always place an aquarium in a location designed to support its total weight. An aquarium filled with water and gravel weighs approximately 10-12 pounds per gallon. Always place an aquarium on a flat, level surface (never on the floor, however). Aquarium stands less than 12” wide should be anchored or tethered to a wall to provide stability. Never place an aquarium in direct sunlight. Full or even partial sunlight can cause excessive algae growth.

Handle your aquarium with care.
Never attempt to move a full or partially full aquarium. Never lift an aquarium with wet hands. Always grasp and carry an aquarium from underneath, supporting the bottom at all times.

Change your aquarium water regularly.
Partial water changes - 25% at least once a month - are vital to maintaining a healthy aquarium. Always fill with room temperature water.

Treat all new aquarium water.
Always dechlorinate water before adding it to your aquarium. Do not add plain tap water - it can kill your fish.

Clean aquarium gravel regularly.
Use a Marineland Power Kleen Gravel Washer to suction out grunge and debris. Replace your Emperor Filter Cartridge at least once a month. If water appears cloudy and/or bad smelling, change the cartridge immediately.
CUSTOMER SERVICE INFORMATION

For additional assistance or to order parts direct, you may call the Customer Service Department at (800) 322-1266 M-F, between the hours of 8am and 5pm (Pacific Time). Please have your manual and MasterCard or VISA ready when ordering.

NOTE: Emperor Filter Cartridges and Filter Cleaning Brush are not sold as replacement parts. They may be purchased at your local Marineland retail outlet.

THE EMPEROR 280 REPLACEMENT PARTS LIST

<table>
<thead>
<tr>
<th>KEY</th>
<th>ITEM DESCRIPTION</th>
<th>ITEM NO.</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Two-Way Hinged Cover Assembly</td>
<td>PR2105</td>
</tr>
<tr>
<td>2</td>
<td>Filter Box</td>
<td>N/A</td>
</tr>
<tr>
<td>3</td>
<td>Intake Strainer</td>
<td>PR2110</td>
</tr>
<tr>
<td>4</td>
<td>Intake Tube</td>
<td>PR2111</td>
</tr>
<tr>
<td>5</td>
<td>Intake Tube Extension</td>
<td>PR2112</td>
</tr>
<tr>
<td>6</td>
<td>Intake Tube Extension Coupler</td>
<td>PR2113</td>
</tr>
<tr>
<td>7</td>
<td>Flow Manifold Housing Cover</td>
<td>PR2122</td>
</tr>
<tr>
<td>8</td>
<td>Flow Manifold Housing</td>
<td>PR2125</td>
</tr>
<tr>
<td>9</td>
<td>Magnetic Impeller Assembly - Green</td>
<td>PR2126</td>
</tr>
<tr>
<td>10</td>
<td>Spray Bar Assembly</td>
<td>PR2130</td>
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<tr>
<td>11</td>
<td>Spray Bar O-Rings - Pkg. 4</td>
<td>PR2045</td>
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<tr>
<td>12</td>
<td>BIO-Wheel Assembly - Emperor</td>
<td>PR2140</td>
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<tr>
<td>13</td>
<td>BIO-Wheel Bearing(s) - Pkg. 2</td>
<td>PR2141</td>
</tr>
<tr>
<td>14</td>
<td>Emperor Media Container</td>
<td>PR2150</td>
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<tr>
<td>15</td>
<td>Emperor Filter Cartridge - 2 pack</td>
<td>PA0137-2</td>
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<tr>
<td>16</td>
<td>Emperor Filter Cartridge - 4 pack</td>
<td>PA0137-4</td>
</tr>
<tr>
<td>N/S</td>
<td>Filter Cleaning Brush (not shown)</td>
<td>PA0590</td>
</tr>
</tbody>
</table>
CUSTOMER SERVICE INFORMATION

For additional assistance or to order parts direct, you may call the Customer Service Department at (800) 322-1266 M-F, between the hours of 8am and 5pm (Pacific Time). Please have your manual and MasterCard or VISA ready when ordering.

NOTE: Emperor Filter Cartridges and Filter Cleaning Brush are not sold as replacement parts. They may be purchased at your local Marineland retail outlet.
**ASSEMBLY/OPERATIONAL INSTRUCTIONS**

10 simple steps to Final Assembly and Installation of your new Emperor Power Filter.

**STEP 1: INSTALL EMPEROR CARTRIDGE(S)**

Rinse Emperor Filter Cartridge(s) thoroughly under cold water to remove any dust. Shake cartridge horizontally (blue side up) to evenly distribute carbon over ribbed back. Slide Filter Cartridge(s) into Filter Cartridge Channels (narrow side down, ribbed back facing toward aquarium, Figure 1). Be sure each is seated securely in bottom channel.

**STEP 2: FILL MEDIA CONTAINER(S)-OPTIONAL**

Emperor Refillable Media Container(s) can be used for additional filtration. Open and fill the “bottom” half with Black Diamond Premium Activated Carbon, White Diamond Ammonia Neutralizing Crystals or Diamond Blend. DO NOT OVERFILL.

To ensure a tight fit upon closing, make sure that entire surface area of Surrounding Well and tops of Interior Shelves are absolutely free of debris (Figure 2). Then rinse under fresh cold water to remove any dust.

**STEP 3: INSTALL MEDIA CONTAINER(S)**

Slide Media Container(s) into Media Container Channels. For optimum mechanical filtration, Emperor Cartridges and Media Containers should always be positioned as shown (Figure 1). As an alternative, additional Emperor Cartridge(s) may be used in place of Media Container(s).

**STEP 4: INSTALL FILTER BOX**

Hang Filter Box in desired location on back of aquarium.

**STEP 5: ASSEMBLE INTAKE TUBE AND STRAINER**

Slip Intake Strainer onto long end of Intake Tube. Depending on aquarium size, Intake Tube may be lengthened using the Intake Tube Extension and Extension Coupler (Figure 3).

NOTE: Assembly/Operational and Maintenance instructions for The Emperor and Emperor 280 Power Filters are virtually identical. For this reason, and in the interest of avoiding confusion, the sections that follow feature diagrams for the Emperor model only. You will find that the steps pictured are readily applicable to the Emperor 280 model as well. Most parts are preassembled and do not require disassembly prior to installation. We recommend that you read the Maintenance section that follows to familiarize yourself with the overall operation of The Emperor and Emperor 280.

Before you begin, remove and inspect all parts. If any are missing or damaged, there is no need to return the entire Emperor unit. Replacement parts may be obtained from the store where purchased, or by calling Marineland Customer Service - (800) 322-1266.
**STEP 6: INSTALL INTAKE TUBE**
The Tube Guides on either side of the Intake Tube slide into the Tube Slots of the Flow Manifold Housing. This holds the Intake Tube securely in place (Figure 4). Be sure that Tube fits securely in the Housing Collar. Once in place, Intake Tube should not wobble.

*Note:* If Intake Tube is not properly seated, filter will not operate.

**STEP 7: ADD WATER**
Pour water into Filter Box until approximately half full.

**Important:**
NEVER allow the Emperor System to operate without water at any time.

**STEP 8: REPLACE COVER AND SET FLOW CONTROL**
Make sure One-Touch Control is in “full flow” (extreme “up”) position. (Figure 5).

*Important:* To prevent wasteful overloading of Emperor Cartridge with fish food, reduce water flow by simply pressing down on the Flow Control. This will not affect BIO-Wheel rotation or compromise biological filtration. After feeding, be sure to return Flow Control to “up” position.

**STEP 9: START YOUR EMPEROR**
Creating a Drip Loop (see pg. 2-3), plug cord into standard receptacle. Filter will make a bubbling sound as air is evacuated from Intake Tube. Once the air is gone (approximately 40 seconds), the filter will fill and water will begin to flow back into aquarium. Water flow through Spray Bar(s) will initiate rotation of BIO-Wheel(s).

*Note:* Do not force plug into a non-polarized receptacle. Adapters are available at most hardware stores.

**CAUTION:** IF YOU CHOOSE TO USE AN OUTLET STRIP...
Use only one that is properly approved and equipped with a fuse or circuit breaker. Place outlet strip away from aquarium tank and make sure all receptacles are protected from water splash, spillage or vapor. Frequently check electrical equipment and connections for signs of moisture, greenish corrosion or black sooty residue (arching). If evident, turn off power IMMEDIATELY and correct the problem.

**STEP 10: ADJUST BIO-WHEEL ROTATION**
Turn Spray Bar Adjustment Knob(s) up or down to change angle of water flow. Do not attempt to force Spray Bar(s) past the range allowed by bar lock(s). Adjust Spray Bar(s) to rotate slowly...faster rotation does not enhance performance.

BIO-Wheel rotation can be easily monitored via the BIO-Wheel Indicator Windows (Figure 6).

*Remember, optimum biological filtration takes time.* When creating a new aquarium environment, patience is the first key to success. Begin your setup with a few fish, adding more fish gradually over a 4-6 week period. This allows the BIO-Wheel to establish a beneficial bacteria culture and develop peak operational efficiency. Also, a cultured BIO-Wheel can be transferred to other new aquarium environments to speed the break-in process.
We recommend the following complete maintenance procedure as needed (at least every 2 months):

1. Remove BIO-Wheel(s) and set aside. To avoid disturbing bacteria culture, handle a BIO-Wheel by the Caps and/or Axle (Figure 10). Any algae, mineral deposits or other buildup that hinder rotation can be eliminated with a gentle rinse in room temperature water.

2. Gently clean BIO-Wheel Bearings and inspect for wear. It is not necessary to remove Bearings (Figure 11). If Bearings are worn, they may then be removed and replaced.

IMPORTANT: Every BIO-Wheel is preassembled at the factory. It should not be tampered with or disassembled. Discoloration of pleated material is normal and desirable. NEVER CLEAN BIO-WHEEL. If it becomes so heavily cultured that it no longer rotates, you can gently rinse the surface to remove the heaviest buildup. Use treated (dechlorinated), room temperature tap water only. As long as a BIO-Wheel is not damaged, it does not need to be replaced.
3. Remove and discard used Emperor Cartridge(s). Remove, empty and clean Media Containers(s).

4. Remove Intake Tube from Flow Manifold Housing (Figure 12). Brush inside tube surface clean. Rinse with cold water.

5. Carefully remove Emperor unit from back of aquarium.

6. Release and remove Spray Bar(s) (Figure 13).

7. Clean thoroughly with custom Cleaning Brush (Figure 14). After cleaning, set Spray Bar(s) aside until reassembly.

8. Gently lift Flow Manifold and Magnetic Impeller Assembly from Filter Box (Figure 15).

9. Remove Magnetic Impeller Assembly and Manifold Cover as shown (Figure 16). Clean Impeller and rinse thoroughly. Inspect for wear. Purchase new part if excessive wear or damage is evident.

10. Clean all parts thoroughly. Rinse with cold water. After reassembly, Impeller should rotate freely and silently - without wobble or hindered motion of any kind. Do not reinstall Flow Manifold yet.

11. Using cold water, wipe down the inside and outside surface of empty Filter Box with a clean cloth. Using custom cleaning brush, clean Impeller Sump carefully and completely, making sure that no debris or particles remain (Figure 17).

12. Reassemble parts. Refer to Parts Diagram (Pages 10 & 11) if necessary. Remember to wet O-rings when replacing Spray Bar(s). Also, make certain that Spray Bar(s) “snaps” firmly into place.

13. Install new Emperor Filter Cartridge(s).

**NOTE:** Use only genuine Emperor Cartridges. Substitutions often contain lower grades and/or quantities of carbon and may not fit properly. This can result in reduced filtration effectiveness.

Refill and install Media Containers(s).

## TROUBLESHOOTING GUIDELINES

**IMPORTANT:**
Always unplug the Emperor when inspecting or disassembling.

### SYMPTOM | COMMENTS/SOLUTION
--- | ---
If the Emperor fails to start (or stops) pumping water... | Be Sure you have primed the filter box properly (fill box \( \frac{1}{2} \) full prior to plugging in system) and that Flow Control is in the “full flow” position.
Make certain the outlet has power and is functioning properly by first unplugging electrical cord momentarily, then reconnecting to power source to restart the Impeller.
Check to see that Flow Manifold is seated firmly in Filter Box and that aquarium water is at correct level (\( \frac{1}{2}'' \)-\( \frac{3}{4}'' \) from top of aquarium). Inspect Intake Tube to ensure that it is not displaced from inside the Impeller Housing Collar.
Remove Flow Manifold and make certain that the Magnetic Impeller Assembly is free to rotate. A particle of carbon or gravel may be interfering with rotation.

If the Emperor makes mechanical noise... | Remove Flow Manifold and make certain Magnetic Impeller Assembly is free to rotate. Debris may be hindering silent rotation.
Replace worn or damaged Magnetic Impeller Assembly. Refer to parts list for part number.

If BIO-Wheel splashes and/or makes excessive water noise... | Allow 24-48 hours for “breaking in” period. Material in a BIO-Wheel is not fully absorptive when new.
Check aquarium water level. Lower than normal levels can result in excessive splash or noise.
Adjust Spray Bar to ensure slow BIO-Wheel rotation.

If BIO-Wheel stops... | Don’t panic. Chances are, the wheel is not permanently stopped. Irregular rotation, including brief pauses, is normal. As long as the wheel continues to move periodically and remains wet, it is functioning properly.

If BIO-Wheel appears permanently stopped or obstructed... | Inspect BIO-Wheel Bearings and Axle for dirt or mineral deposits. If evident, clean these areas carefully.
Make sure all parts are installed properly and that there are no obvious obstructions to free rotation.
Check Spray Bar and Spray Bar apertures for obstructions. If evident, clean areas carefully.
Examine Intake Tube for flow obstruction.
Perform regular filter maintenance.

If a BIO-Wheel becomes discolored... | This is not a problem. It indicates the development of beneficial biological culture. Do not attempt to clean BIO-Wheel pleats.

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**Customer Service:**
(800) 322-1266
M-F, 8AM - 5PM (Pacific Time)