# **COMPATIBLE ACCESSORIES**

These "Eco" Pumps are designed for compatibility with the specific water feature accessories and filtration components listed on each package. Used properly, they provide decorative visual effects and help create a healthy pond environment.

While they are compatible with other brands and home-made components, they SHOULD NOT BE MODIFIED IN ANY WAY to connect to other accessories.

### 1. Waterfall Weir 16" – AD46555

The easy way to add a waterfall basin, which includes Mechanical and Biological Filtration to your system. Requires 100% of flow from this 750gph pump, at a maximum of 2 foot lift.



#### 2. Filters

The 750gph pump is compatible with the Biological Pressure Filter 1000 (AD46216), used with 100% of pump flow, or as a secondary feature. Also a great match with either of our filter box items - 600 (AD46400) or 1500 gallon (AD46500).

### Universal Nozzle Kit – AD42136

This Nozzle Kit is designed especially for this pump. It includes a 2-way diverter for powering the nozzle feature and either a spouting statue, small waterfall, external filtration or UV clarifier components.



#### 4. UV Clarifiers

Our 9 watt UV Clarifier (AD46530), used as a secondary feature, or a more powerful 18 watt unit, help contribute to a clear, clean pond environment.



## LIMITED WARRANTY

This pump is warranted to the original user against defective materials and workmanship for a period of 12 months from date of purchase for the motor, impeller, and mechanical components. Connections and plastic components carry a 90 day warranty. Our limited warranty does not cover any costs associated with the installation or removal of products subject to warranty claims or the cost of return of the pump. The warranty will commence from the date of purchase. Replacement liability is limited to any part or parts of the unit which have failed due to defective material or workmanship. Proof of purchase is required for all claims against the limited warranty. This warranty does not extend to damage of the product or part resulting from accident, misuse, alteration, neglect, abuse, improper installation or normal wear and tear to the product(s). This limited warranty extends only to the original user of the product.

For more information, please visit our web site:

#### www.angelodecor.com

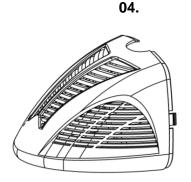
**To contact us** regarding this unit, your options include: customersupport@angelodecor.com | Phone: (780) 453 - 6646 | Fax: (780) 453 - 6620 Angelo Décor International Inc. | 15840 – 118<sup>th</sup> Avenue | Edmonton, AB |T5V 1C4



# **COMPONENTS**

- 01. Barbed Output 1" 2 Pieces are included if using pump for in-line operation
- 02. Multi Size **Tubing Output** (part # 3 also required)
- 03. Male Adapter For converting pump to 1" Male Output

04. Pre-Filter Housing



1" OD

Barbed Fitting

1" Threads

Gasket (2)

05. Pump Body

# **IMPORTANT USE AND CARE ADVICE BEFORE YOU BEGIN:**

This pump is designed for use in "clean water applications" if you are using only the supplied pre-filter housing. They are compatible with fresh water only.

This series of pump is designed to provide the circulation necessary to maintain a healthy pond environment using the lowest possible energy use. Used properly, they operate compatible filtration components and water features at the stated performance levels outlined on the product package.

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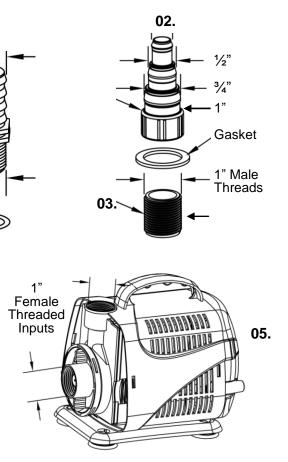
Dramatic, High-Lift water features require a secondary pump (Ideally our Pro-Grade Series) that consumes more energy to produce the desired effect. Using in conjunction with a timer or remote control, only when the dramatic affect is desired, will reduce unnecessary energy use and cost.

Connecting the pump to a separate filter (Ideally a Pond Building Series<sup>™</sup> item) is highly recommended. They include both mechanical and biological components that will protect your pump while improving water quality.

This pump has a solids handling capacity of up to 6mm, and is ideally suited to use in conjunction with either of our in pond filter box items. A pressurized filter (with or without UV clarifiers) that can be located in an external location is also a good choice.

Using this series of pump without proper filtration will cause increased maintenance and could result in pump failure due to a build-up of dirt and debris. This type of improper pump care is not covered under warranty.

For maximum satisfaction with your project, as well as the overall balance and health of your pond, we suggest choosing a filter that slightly exceeds your current pond plan as most consumers will upgrade features, fish, and plants during the life cycle of your project.



# WARNINGS: SAFETY AND ELECTRICAL CONNECTIONS

The pump is supplied with 5M of 3 core electrical cable which is permanently connected and sealed to the motor. This cable cannot be replaced. If the cable is damaged the pump should be discarded.

Do not modify this cable, or any electrical component, for any reason.

- 1. Only use power supply with properly rated voltage and frequency as stated on the pump.
- 2. Create a "drip loop", with part of power cord below the level of the connected receptacle.
- Pump must be connected to an approved ground fault circuit interrupter (GFCI) receptacle.
- 4. Always **unplug** or disconnect all appliances from the electrical supply **before** putting hands in the water, while equipment is being installed, repaired, maintained or handled.
- 5. Do not use the electrical cable to lift the pump as this may cause damage to the cord.
- 6. Do not operate or leave the pump in freezing conditions.
- 7. Do not allow the pump to run dry. The pump must always be fully submerged.
- 8. Do not use pump for ANY heated or flammable liquids
- 9. Do not use in water that exceeds  $40^{\circ}$ C

# **ASSEMBLY ADVICE**

- 1. Maximum performance is achieved, and pump works best when used with largest outputs and tubing sizes available. Restricting water flow with small accessories will reduce the performance specifications indicated on the package.
- 2. When using the Multi-Sized barbed output, cut the smaller sizes that are smaller than your tubing size off with a hacksaw. This will help maximize flow.
- On threaded connections, adding Teflon tape is recommended to get a perfect seal.

## **INSTALLATION IN POND**

- 1. "Prime the Pump" by submersing in a container of water and connect to power to test run the unit.
- 2. Place your pump on top of a flat brick or stone approximately 1" 4" from the bottom of your pond to help prevent debris from interfering with the pump's performance.
- 3. Make sure the cable is securely routed to the GFCI electrical supply and is protected against abrasion and damage from rocks, sharp objects, or pond features and accessories.
- 4. If using in an "In-line" application, OUTSIDE OF THE POND, pump must be positioned below the pond water level. Installing above the water line would require additional plumbing such as a check valve installed to prevent water from exiting the pump, causing air pockets in the line which can severely affect performance and cause harm to the pump.



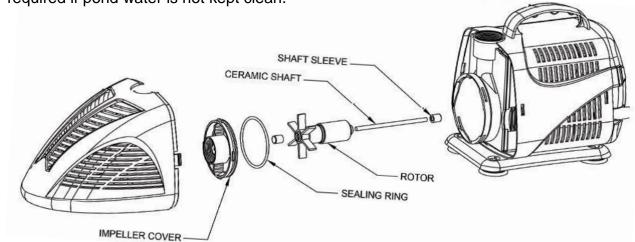
# **OPERATIONAL ADVICE**

- 1. When using this pump to operate multiple features, calculate the flow to each component to allow the use of items like UV and Pressure filters that operate at a lower flow rate.
- 2. Monitor all connections and accessories for at least the first hour of initial operation to insure against any leaking or water loss.
- 3. Regularly check that power plugs are secure, and power supply is not showing signs of overheating or power leakage. Safeguard against pond water leakage to these connections.
- 4. Do not operate this pump below 40°F (4°C), otherwise freezing damage may occur. If temperature is likely to fall below 0°C remove the pump from the pond, ensure all water is removed from the pump and the unit is completely dry and stored in a frost-free place.

## MAINTENANCE

## Regular maintenance must be performed to keep your pump running properly. Always disconnect the pump from the electrical supply before handling.

- Inspect the cord for any damage or deformation from heat or other sources.
- Check the water level daily to ensure the pump remains fully submerged.
- Clean the pump exterior, especially the pre-filter housing, regularly to remove debris, and ٠ prevent mineral deposits and contamination.
- In clean water conditions, disassemble the unit at least once per season to clean any build-up of debris or mineral deposits inside the impeller and rotor assembly. More frequent cleaning is required if pond water is not kept clean.



# **TROUBLESHOOTING TIPS**

# **REMEMBER: ALWAYS DISCONNECT THE PUMP AND ANY ACCESSORIES FROM** THE ELECTRICAL SUPPLY BEFORE HANDLING.

If the pump appears to operate, but there is low or irregular water flow:

- Make sure the pump is fully submerged.
- Check the tubing for kinks or obstructions. Ensure pump outlet is clear of objects.
- Check water inlet for any obstructions.

## If the pump does not operate, and there is no water flow:

- Make sure power cord is securely plugged into a tested and stable working power supply
- Remove front cover and impeller cover to access rotor area.
- Rotate the rotor to ensure it is not broken or jammed. Remove the rotor to check it is free from any debris. Rinse the cover and re-assemble.