

Submersible Pump Instructions

Models: Eco 100 / Eco 185 / Eco 264 / Eco 396 / Eco 633 /
Eco 1056 / Eco 1267 / Eco 1584 / Eco 2245
Product: #728494 / #728300 / #728305 / #728310 / #728315 /
#728320 / #728325 / #728330 / #728333



Submersible Pump Instructions

The EcoPlus submersible pumps are quality products, designed using the very latest technological developments. The pumps are suitable for use in hydroponic systems, ponds, aquariums, fountains and filter systems. The pumps have been developed on the basis of the so-called synchronous technology, whereby the electrical parts are fully encapsulated in epoxy resin.

USE

The pumps have an economical, powerful and reliable motor. The entire series are suitable for installation on dry land for in-line use or submersibly into the water. The EcoPlus submersible pumps are equipped with a ceramic shaft and therefore also suitable for use in salt water.

OPERATION

Read these instructions very carefully before you start. NEVER let the pump run dry. Place the pump at least 6 inches and no more than 3 feet below the water surface, on a stable surface that is free of sludge, sand and other debris. Add fountain extension pipes so that the fountain head is above the surface of the pond. (1) Turn the flow control clockwise to increase flow and counter-clockwise to reduce flow. (2) Water bell nozzle is adjusted by moving the head higher for small bell and lower for a wider bell shape.

SAFETY REQUIREMENTS

The power supply must comply with the specifications on the product. The national code requires that a GFCI (Ground Fault Circuit Interrupter) be utilized in the branch circuit, which supplies electrical power to the EcoPlus pump and all other electrical aquarium or hydroponic equipment. NEVER pull the pump by the power cord and NEVER remove the pump from the water by pulling on the power cord. NEVER remove the power plug or shorten the cable. Your warranty is void if you do not comply with the operation and instructions noted above. Keep the electrical connection (plug and wall socket) dry.

The pump is not suitable for use in swimming pools, swimming ponds or other situations where persons could make bodily contact with the water. Always unplug the power cord before cleaning the pump or carrying out water maintenance.

MAINTENANCE & CLEANING

The EcoPlus submersible pumps do not require lubrication or special maintenance. The following maintenance and cleansing will improve the pumps performance and life.

Cleaning: When the flow is visibly reduced you may want to clean the pump. Unplug the pump's power cord first, then remove the pump from the water (Do NOT use the cord to lift the pump). Firmly pull the pre-filter cage from the pump motor. Remove the pre-filter sponge and wash thoroughly in fresh water. A blocked sponge will reduce the pump flow rate and performance.

2 Regular Maintenance: Remove the impeller cover by turning counterclockwise to release lock. Firmly pull away from the pump motor. Carefully remove impeller locator and complete



Eco Submersible Pump Technical Information

MODEL	VOLT	FREQ	AMPS (A)	OUTPUT (L/H)	OUTPUT (G/H)	H-MAX (M)	H-MAX (FOOT)	DIMENSIONS (MM)	DIMENSIONS (INCH)
ECO-66	120V	60Hz	.059	284	75	0.75	2.5	49x55x45.5	1.9x2.1x1.7
ECO-100	120V	60Hz	.085	380	100	0.90	3.0	78x42x55	3x1.6x2.1
ECO-132	120V	60Hz	.23	500	132	1.22	4.0	49x67.2x60	1.9x2.6x2.3
ECO-185	120V	60Hz	.22	600	158	1.20	4.0	143x54x75	5.6x2.1x2.9
ECO-264	120V	60Hz	.23	1100	290	1.95	6.5	160x65x90	6.2x2.5x3.5
ECO-396	120V	60Hz	.30	1500	396	1.95	6.5	165x80x115	6.4x3.1x4.5
ECO-633	120V	60Hz	.45	2250	594	2.40	7.5	185x80x110	7.2x3.1x4.3
ECO-1056	120V	60Hz	.74	4100	1083	2.80	9.0	200x110x140	7.8x4.3x5.5
ECO-1267	120V	60Hz	1.60	5100	1347	4.50	13.5	230x102x160	9.0x4.0x6.2
ECO-1500*	120V	60Hz	1.7	5700	1505	6.10	20.3	176x124x222	6.9x4.9x8.7
ECO-1584	120V	60Hz	2.046	6200	1638	4.00	12.5	238x130x176	9.3x5.1x6.9
ECO-2245	120V	60Hz	2.05	8200	2166	5.00	16.5	270x148x178	10.6x5.8x7

* Not UL listed



CAUTION

THERMALLY PROTECTED ENCLOSURE TYPE 3 FOR INDOOR AND OUTDOOR USE.

THIS PUMP HAS BEEN EVALUATED FOR USE WITH WATER ONLY.

WARNING

RISK OF ELECTRIC SHOCK - THIS PUMP HAS NOT BEEN INVESTIGATED FOR USE IN SWIMMING POOL OR MARINE AREAS.

TO REDUCE THE RISK OF ELECTRIC SHOCK, INSTALL ONLY ON A CIRCUIT PROTECTED BY A GROUND-FAULT CIRCUIT-INTERRUPTER (GFCI).

RISK OF ELECTRIC SHOCK - THIS PUMP IS SUPPLIED WITH A GROUNDING CONDUCTOR GROUNDING-TYPE ATTACHMENT PLUG. TO REDUCE THE RISK OF ELECTRIC SHOCK, BE CERTAIN THAT IT IS CONNECTED ONLY TO A PROPERLY GROUNDED, GROUNDING-TYPE RECEPTACLE.

TO REDUCE THE RISK OF ELECTRIC SHOCK, SEE INSTRUCTION MANUAL FOR PROPER INSTALLATION.

INSTALLATION INSTRUCTIONS

WARNING

TO REDUCE THE RISK OF ELECTRIC SHOCK, USE ONLY ON PORTABLE SELF CONTAINED FOUNTAINS NO LARGER THAN 5 FEET IN ANY DIMENSION.

impeller. Wash parts with fresh water carefully. Once you have cleaned the pump, reassemble it in reverse order. Cleaning frequency will depend on the conditions under which the pump is used.

Do not allow the pump to freeze up in the winter. Make sure to remove the pump from a pond or fountain and store it in a frost-free place.

WARRANTY

This product has a warranty of one year for any defects in materials or workmanship. Warranty is NOT VALID if the pump is not properly used, neglected, or there is a lack of maintenance or accidental damage either to the pump or to the impeller or impeller shaft. If the pump fails due to manufacturing fault within this warranty period, the pump will either be repaired or replaced free of charge. Please return the pump to the place of purchase with the original bill receipt.

The manufacturer or distributor shall not be held responsible for any damages cause by defective components or materials, or for loss incurred because of the interruption of services or any consequential, or incidental damages or expenses arising from the manufacture, sale, use or misuses of this product. The manufacturer shall not be held responsible for any loss of fish, plants or other livestock as a result of any failure or defect of this product.

This warranty excludes the sponge prefilter and impeller which may require replacing annually.

- Use with 120 volt power source.
- The pump is provided with a thermal protector that temporarily switches off the pump in case of overheating and the pump may automatically restart.

IMPORTANT SAFETY INSTRUCTIONS

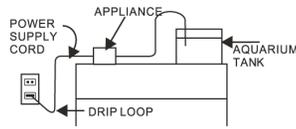
Warning: To guard against injury, basic safety precautions should be observed, including the following:

1. READ AND FOLLOW ALL SAFETY INSTRUCTIONS.

2. **DANGER:** To avoid possible electric shock, special care should be taken since water is employed in the use of aquarium, hydroponic systems and pond 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:

- If the appliance shows any sign of abnormal water leakage, immediately unplug it from the power source. (Submersible equipment only)
- Carefully examine the appliance after installation. 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.

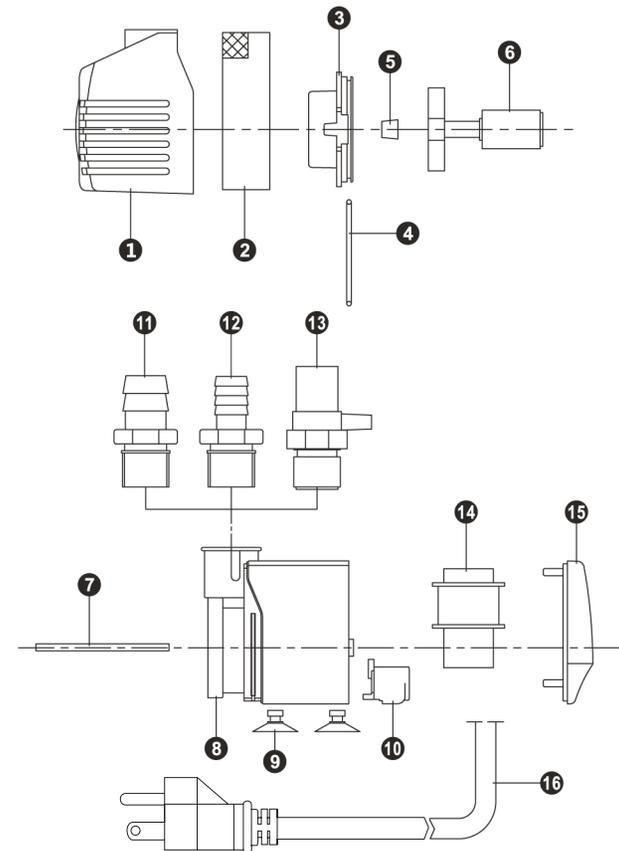
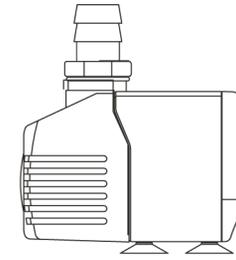
- To avoid the possibility of the appliance plug or outlet getting wet, position aquarium stand and tank to one side of a wall-mounted outlet to prevent water from dripping onto outlet or plug. A "drip loop" shown in the figure to the right, should be arranged by the user for each cord connecting an aquarium appliance to an outlet. The "drip loop" is the part of the cord below the level of the outlet, or the connector is an extension cord is used, to prevent water traveling along the cord and coming in contact with the outlet. If the plug or outlet 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 outlet.



- Close supervision is necessary when any appliance is used by or near children.
- To avoid injury, do not contact moving parts or hot parts such as heater, reflectors, lamp bulbs, and the like.
- 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.
- Do not use an appliance for other than intended use. The use of attachments not recommended or sold by the appliance manufacturer may cause unsafe conditions.
- Do not install or store the appliance where it will be exposed to the weather or temperatures below freezing.
- Make sure appliance mounted on a tank is securely installed before operating it.
- Read and observe all the important notices on the appliances.
- If an extension cord is necessary, a cord with a proper rating should be used. A cord rated for less than 120 volts may overheat. Care should be taken to arrange the cord so that it will not be tripped over or pulled.
- This appliance has no user serviceable parts.

12. SAVE THESE INSTRUCTIONS.

PARTS DESCRIPTION



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|-----------------|---------------|------------------|-----------------------|
| 1. Front cover | 5. Bush | 9. Suction cup | 13. Air supply outlet |
| 2. Foam | 6. Rotor | 10. Cable clip | 14. Stator |
| 3. Pump chamber | 7. Shaft | 11. Big outlet | 15. End cover |
| 4. O-ring | 8. Motor body | 12. Small outlet | 16. Cord |

Fountain nozzles are optional.