Commercial Grade Air Pump Instructions

Models: ECOair 1 / ECOair 3 / ECOair 5 / ECOair 7
Product: #728450 / #728455/ #728457 / #728459
Thank you for purchasing an EcoPlus® brand ECOair Commercial Grade Air Pump. For optimum performance and safety, please read this instruction manual carefully and keep it handy for future reference.

**Features**
- The case is made of high-quality ZL 102 aluminum alloy with radiation fins, for which heat-dissipation is more effective.
- Driven by an electromagnetic motor, adopts straight-line reciprocal motion to produce air and more reasonable in structure.
- Adopts SF new-type wear-resistant material for the cylinder and piston, which is of lower consumption.
- Oil free lubricated design, the compressed air is purified.
- Constant temperature and pressure operation to ensure reliable performance.

**How it Works**
When the electromagnetic coils are energized by the AC power, a magnetic force is generated. Under the action of this magnetic force and the pressure spring, the piston moves reciprocally so that the volume of cylinder changes. This leads to the automatic opening and shutting of the inlet and outlet valves and thus achieves the work cycle of air intake, compressing and discharging.
Parts List
1. Air Inlet Filter
2. Spring
3. Motor Coils
4. Cylinder
5. Rotor
6. SF3 Piston
7. Valve and Valve Base
8. Air Outlet Adapter

Installation
Place your air pump above the water level in a vertical OR horizontal position. If you place it below the water level you MUST use a valve, this way you will avoid any back flow of water when current falls.

Operation
NOTE: Your pump is not intended to be used in water. Never place the pump in water.

DANGER: In case of accidental submersion in water, disconnect the power cord before you remove the pump, in order to avoid shock.

1. Connect air outlet to the distributor and start the unit. The outlet hose may be connected to the pipe distributors for air stones or air curtains. Each unit can supply air to 6 - 12 pipes. (Fig. 1)
2. In case the air exhaust is reduced or without air exhaust, check the connecting parts for leakage; or disconnect the plug, remove the front cover, the valve and the valve base, wash away the dust on them with water, remount with care after drying. (Refer to the cutaway view.)
3. If the unit does not work after connecting the power source, in most cases the connecting point of the diode is broken or obvious shifting happens between the gap of the motor’s piston and housing due to the rough transportation. Reassembly of the parts is needed for resuming normal operation. (Fig. 2)

4. When making the connection, adjust the length of the air outlet hose between the compressor and the reservoir; and ensure the hose is not kinked or blocked. (Fig. 3)

5. When the work area is removed from the power source, use an extension cord of sufficient thickness and rated capacity. The extension cord should be kept as short as possible.

6. Inspect all mounting screws regularly and ensure that they are properly tightened. Should any of the screws be loose, tighten them immediately.
<table>
<thead>
<tr>
<th>Model</th>
<th>Input</th>
<th>Freq.</th>
<th>Watts</th>
<th>Pressure</th>
<th>Output</th>
<th>Weight</th>
<th>Size</th>
</tr>
</thead>
<tbody>
<tr>
<td>728450</td>
<td>120 V</td>
<td>60 Hz</td>
<td>18 W</td>
<td>2.90 psi</td>
<td>793 gph</td>
<td>2.65 lbs</td>
<td>159 x 90 x 95mm</td>
</tr>
<tr>
<td>728455</td>
<td>120 V</td>
<td>60 Hz</td>
<td>35 W</td>
<td>3.77 psi</td>
<td>1030 gph</td>
<td>3.64 lbs</td>
<td>182 x 95 x 116mm</td>
</tr>
<tr>
<td>728457</td>
<td>120 V</td>
<td>60 Hz</td>
<td>80 W</td>
<td>5.22 psi</td>
<td>1300 gph</td>
<td>7.27 lbs</td>
<td>232 x 120 x 148mm</td>
</tr>
<tr>
<td>728459</td>
<td>120 V</td>
<td>60 Hz</td>
<td>200 W</td>
<td>6.96 psi</td>
<td>3566 gph</td>
<td>14.1 lbs</td>
<td>307 x 156 x 189mm</td>
</tr>
</tbody>
</table>

**Maintenance**

How to disconnect the air pump:
A) Remove the tubing connected to the aquarium.  
B) Disconnect the power cord.

**DISCONNECT THE POWER SUPPLY TO ALL EQUIPMENT IN THE RESERVOIR BEFORE PUTTING YOUR HANDS IN THE WATER.**

**SPECIAL CARE SHOULD BE TAKEN WITH THE USE OF ELECTRICAL EQUIPMENT BY OR NEAR CHILDREN.**

- Use with 120 volt power source.
- If the power cord or the pump case is damaged or broken, it must be replaced before using.
- DO NOT submerse the pump!

**Warranty**

This product has a warranty of one year for any defects in material 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. If the pump fails due to manufacturing fault within this warranty period, the pump will be either repaired or replaced free of
charge. Please return the pump to place of purchase with the original bill receipt.

The manufacturer or distributor shall not be held responsible for any damages caused 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.

IMPORTANT SAFETY INSTRUCTIONS

THESE INSTRUCTIONS MUST BE CAREFULLY READ BEFORE YOU CONNECT THE PRODUCT. WE CANNOT TAKE ANY RESPONSIBILITY FOR DETERIORATION CAUSED BY IMPROPER USE OF THE PRODUCT.

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

A) READ AND FOLLOW ALL SAFETY INSTRUCTIONS.

DANGER - To avoid possible electric shock, special care should be taken since water is employed in the use of reservoirs and aquariums. 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:

- 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 reservoir or aquarium stand and tank to one side of a wall mounted outlet to prevent water from dripping onto the outlet or plug. A “drip loop” should be arranged by the user for each cord connecting an appliance to an outlet. A “drip loop” is that part of the cord below the level of the outlet, or the connector if an extension cord is used, to prevent water travelling along the cord and coming in contact with the outlet. If the plug or outlet does get wet, DO NOT unplug the cord. Disconnect the circuit breaker that supplies power to the appliance. Then, unplug and examine for presence of water in the outlet.

B) Close supervision is necessary when any appliance is used by or near children.

C) To avoid injury, do not contact moving parts or hot parts such as heaters, reflectors, lamp bulbs, etc.

D) Always unplug an appliance from an outlet when not in use, before putting on or taking off parts, and before cleaning. Never yank the cord to pull the plug from the outlet. Grasp the plug and pull to disconnect.

E) Do not use a pump for other than intended use.