

GENERAL INFORMATION

Thank you for purchasing your United Biologics Flow Pump. To help ensure trouble-free operation, please read the following carefully.

Before Operation:

Read the following instructions carefully. Reasonable care and safe methods should be practiced.

ATTENTION:

This manual contains important information for the safe use of this product. Read this document as well as the setup instructions completely before using this product and refer to it often for continued safe product use. **DO NOT THROW AWAY OR LOSE THIS MANUAL.** Keep it in a safe place so that you may refer to it often.

Unpacking Pump:

Remove the Flow Pump from the case. When unpacking the unit, check for damage. Claims for damage must be made at the receiving end through the delivery carrier.

Warning: Risk of Electrical Shock — This pump has not been submitted for UL or NEC approval.

Warning: Risk of Electrical Shock — This pump is supplied with a grounding conductor. To reduce the risk of electrical shock, be certain that it is connected only to a properly grounded, grounding-type receptacle.

1. Connect only to a properly grounded, 120-220VAC / 15AMP circuit with GFCI (Ground Fault Circuit Interrupter) protection.
2. Do not use this pump while standing in water.
3. Do not allow the pump to sit in or become submerged in water.
4. Always disconnect the pump and controls from its power source before handling or making any adjustments.

Failure to heed above and following cautions and warnings could result in injury or death.

CAUTIONS AND WARNINGS

1. **WARNING: Risk of electric shock.**

- a. To reduce the risk of electrical shock, disconnect plug before handling or making any adjustments.
- b. Connect only to a properly grounded, 120VAC / 15AMP circuit with GFCI (Ground Fault Circuit Interrupter) protection.
- c. DON'T use this pump while standing in water. DON'T allow the pump to sit in or become submerged in water.
- d. If the pump falls into water, DON'T reach for it! First unplug it and then retrieve it. If electrical components of the pump get wet, unplug it immediately.
- e. If the pump shows any sign of abnormal water leakage, immediately unplug it from the power source.
- f. DON'T operate any product if it has a damaged cord or plug, or if it is malfunctioning or if it is dropped or damaged in any manner. Inspect power cord insulation to be sure there are not cuts or exposed wire.
- g. If, for unforeseen reasons, the pump is allowed to run dry for an extended period of time the motors plastic surfaces may warp or melt.
- h. If the plug or receptacle does get wet, DON'T unplug the cord. Disconnect the fuse or circuit breaker that supplies power to the pump. Then unplug and examine for presence of water in the receptacle.
- i. Never yank cord to pull plug from outlet. Grasp the plug and pull to disconnect.

- j. If an extension cord is necessary, care should be taken to arrange the cord so that it will not be tripped over or pulled. DON'T use an extension cord without a ground pin.

2. WARNING: Hot surface hazard. The internal components of this pump can become hot. Do not operate this pump with the backing plate removed.

3. WARNING: Do not disassemble the pump.

4. WARNING: Use of solvents. We do not recommend the use of solvents or petroleum cleaners for cleaning the pump (or any other product made by United Biologics) because of the fire danger. Failure to follow these instructions could result in serious personal injury, death or property damage. Solvents will also discolor and damage your silicone vessels.

5. WARNING: Risk of personal injury. Do not permit children to use this unit without adult supervision.

6. WARNING: Intended use.

- a. Do not use the pump for other than intended use as described in this manual.
- b. Do not make any modifications to the pump system or remove internal components from the factory housing. This could adversely affect the safety and performance of the pump.
- c. Do not use any attachments not recommended by United Biologics.
- d. In case of emergency this pump is not to be used as a floatation device.

PUMP OPERATION

WARNING: Prior to operation, review the **General Information and Cautions and Warnings** sections at the beginning of this manual.

ELECTRICAL CONNECTIONS

- Connect only to a properly grounded, 120VAC / 15AMP circuit with GFCI (Ground Fault Circuit Interrupter) protection.
- At initial start-up with pump power ON, push the GFCI test button. The reset button should pop out. Push this button to reset. If the GFCI fails to operate in this manner, there is a ground fault or malfunction. Turn off the pump power and do not use the pump until the source of the problem has been corrected or an alternate power source is found.

RUNNING THE PUMP

To run the pump, perform the following steps in order:

1. Attach your vessel to the pump via the color-coded tubing provided. Ensure all unused luer lock connectors have securely fastened end caps. Also, ensure the stretch-valves have fully inserted plugs.
2. Fill the 500 ML bottle with water or saline solution.
3. Attach the bottle to the pump. Each latch will click when properly engaged to the connector.
4. Turn the power switch on and slowly increase the pump speed using the control knob. First time use of the pump may require higher pump speeds in order to prime the pump. Normal flow should occur within a few seconds.
5. Raise the return-end of the vessel to facilitate the quick elimination of air bubbles.

TROUBLESHOOTING

No liquid delivered

1. Briefly increase pressure to prime pump.
2. Check for closed valves.
3. Check the hoses and vessel for kinks.

Insufficient pressure

1. Air or gases in liquid.
2. Bottle not properly connected.