



AQUASURGE® ADJUSTABLE FLOW POND PUMP

**AquaSurge® 2000-4000
Adjustable Flow Pond Pump**
Item #45009

**AquaSurge® 4000-8000
Adjustable Flow Pond Pump**
Item #45010



aquascapeinc.com



AquaSurge® Adjustable Flow Pond Pump

Thank you for choosing the AquaSurge® Adjustable Flow Pond Pump. At Aquascape, we connect people to water the way nature intended. Since 1991, we've been creating and field-testing water features in order to provide you with the most reliable products and best value in the water gardening industry.



AquaSurge® Adjustable Flow Pond Pumps are submersible pumps made for continuous use in ponds, Pondless® Waterfalls, and other water feature applications. Asynchronous motor technology provides superior reliability and energy efficiency for years of reliable performance. The included Smart Control Receiver includes an integrated control panel and makes it easy to control your pump with the Aquascape Smart Control App. This instruction manual will guide you through the proper setup and recommended maintenance procedures to ensure long-term effectiveness.

TABLE OF CONTENTS

Introduction	2
Contents	3
Safety Information	3
Specifications Chart	4
Installation	4
General Maintenance	6
Troubleshooting	7
Replacement Parts	8
Warranty Information	8

Contact Us

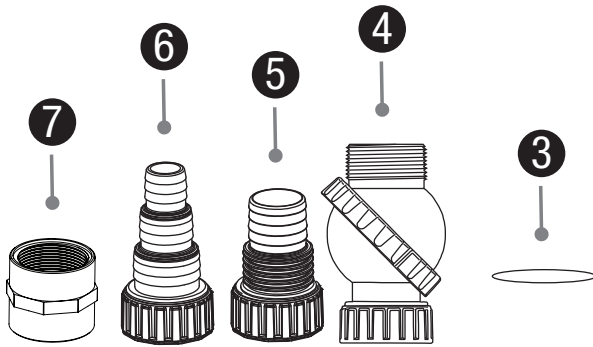
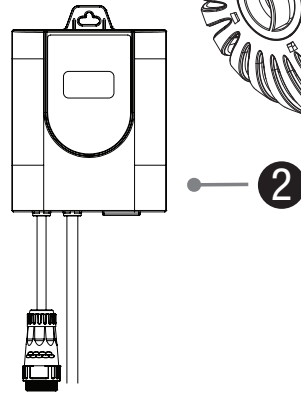
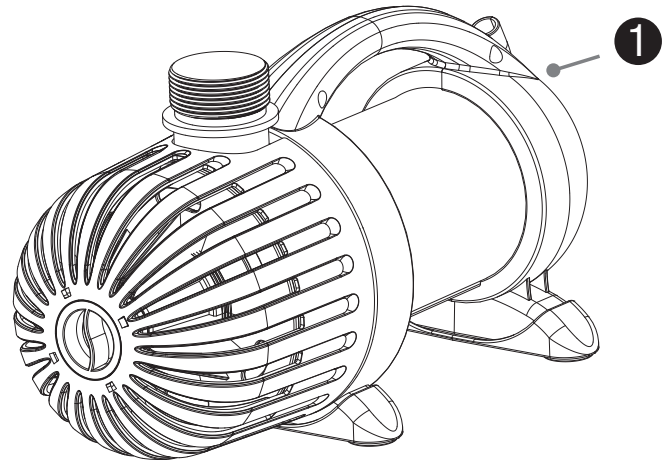
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Contents	
No.	Description
1.	AquaSurge Adjustable Flow Pond Pump
2.	Smart Control Receiver
3.	Flat Rubber Gasket
4.	Rotational Ball Output 38 mm (1½")
5.	Multi-Hose Adapter 38, 50 mm (1½", 2")
6.	Multi-Hose Adapter 25, 32, 38 mm (1", 1¼", 1½")
7.	Female Adapter 38 mm (1½")



Safety Information



WARNING: Risk of electric shock – This pump has not been approved for use in swimming pool or marine areas



WARNING: To provide continued protection against risk of electric shock, connect to properly grounded, Residual Current Device (RCD) outlets only, using the following guidelines:

- (A) Have a qualified electrician install a properly grounded receptacle outlet, acceptable for outdoor use and protected from snow and rain.
- (B) Inspect cord before using.
- (C) Do not use an extension cord.
- (D) Any wiring of pumps should be performed by a qualified electrician to ensure code compliance and user safety.
- (E) Unplug pump at receptacle outlet when not in use or before removal from pond.

- (F) To reduce risk of electrical shock, all wiring and junction connections should be made per local codes. Requirements may vary depending on usage and location.
- (G) The power cable should be protected at all times to avoid punctures, cuts, bruises and abrasions.
- (H) Never handle power cords with wet hands.
- (I) Do not remove cord and strain relief. Do not connect conduit to pump.
- (J) Do not use power cable to lift pump.



- Always operate the pump fully submerged; or if using in-line, ensure a constant source of fresh water. Failure to do so may overheat the pump and cause it to fail, voiding the warranty.
- Use only in fully assembled state, paying particular attention to ensure that both the outer and inner filter screens are attached to the pump. Failure to operate the pump without the filter screen will allow large debris to enter the pump and cause the pump to fail, voiding the warranty.
- Do not wear loose clothing that may become entangled in the impeller or other moving parts.
- Keep clear of suction and discharge openings. DO NOT insert fingers into pump with power connected.
- Do not pump hazardous materials or liquids, such as oil, saltwater or organic solvents.
- Do not block or restrict discharge.
- Products returned must be cleaned, sanitized, or decontaminated, as necessary, prior to shipment to

ensure that employees will not be exposed to health hazards in handling said material. All applicable laws and regulations shall apply.



IMPORTANT: *Aquascape, Inc. is not responsible for losses, injury, or death resulting from a failure to observe these safety precautions, misuse or abuse of pumps or equipment.*

AquaSurge Pond Pump Specifications

- Input Voltage: 240V AC
- Input Frequency: 50 Hz
- Submersible pump
- For outdoor or indoor use
- Thermally protected
- This pump has been evaluated for use with water only
- Input amps & wattage

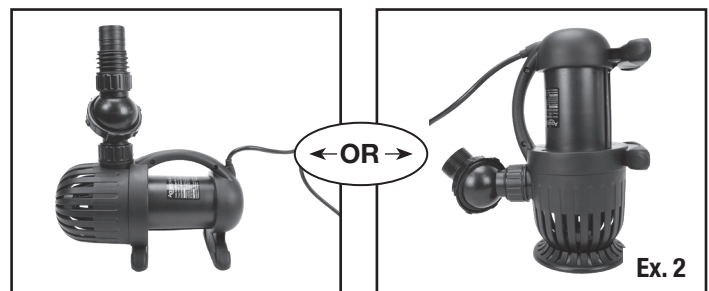
AquaSurge Adjustable Flow Pond Pump Specs

Model Number	2000-4000	4000-8000
Maximum Flow Rate (LPH)	15,000	30,000
Maximum Head Height (m)	5.1	8
Motor Type	Asynchronous	
Volts	240	
*Wattage	215	660
Hertz	50	
Power Cord Length (mm)	10	
Discharge Hose Diameter (mm)	25, 32, 38, 50	

*Wattage range depending on remote control flow setting

Installation

- Do not submerge AquaSurge Adjustable Flow Pond Pump directly into the pond. The AquaSurge Adjustable Flow Pond Pump is designed to be placed inside a skimmer, Pondless® Waterfall Vault, sump or basin. Please consider Aquascape AquaForce® solids-handling pumps (Ex. 1) if your application does not have a filter and requires a pump that can be placed directly into the pond.
- The AquaSurge Adjustable Flow Pond Pump is designed to be installed horizontally on the vibration and noise reducing rubber feet. The pump can also be mounted vertically, if needed, by attaching the filter stand ring on the outer filter screen, included with your pump (Ex. 2).

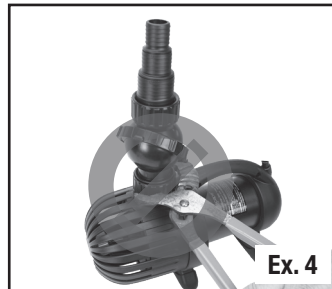
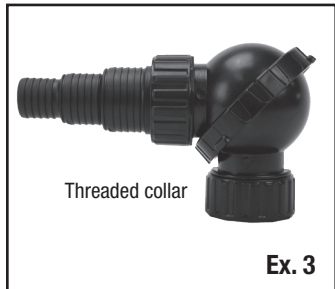


- The AquaSurge includes a wide assortment of fittings from which to choose. Select the appropriate fitting or fittings needed for your application.

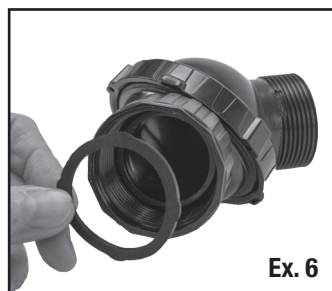
NOTE: If using a check valve, please follow the installation instructions included with the check valve for proper plumbing steps.

- The threaded collar (Ex. 3) on all of the fittings enables the AquaSurge pump to be installed and removed without the need for any tools.

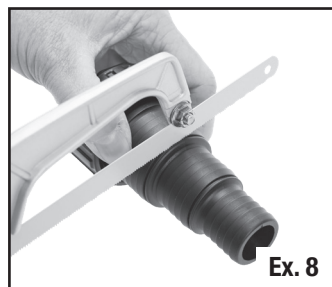
NOTE: Do not use tools to install the fittings to the pump discharge (Ex. 4). Fittings need to be only hand-tight.



- The extremely versatile rotational ball outlet provides you the ability to adjust the pump discharge to the perfect position your water feature setup requires. Loosen the threaded collar (Ex. 5) on the rotational ball and rotate to desired position. A flat rubber gasket (Ex. 6) is included to ensure a hand-tight and leak-free connection. Make sure this flat rubber washer is in place before installing the fittings.



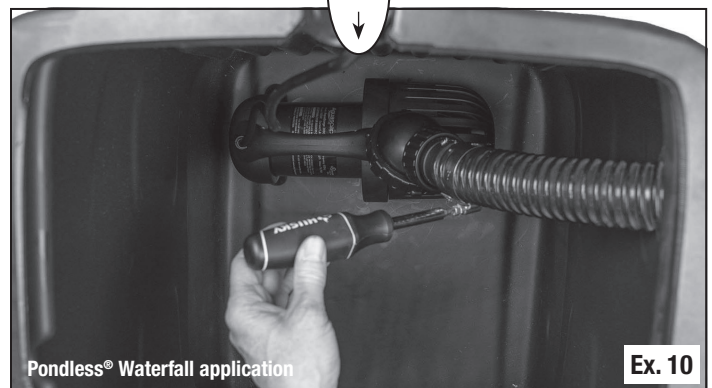
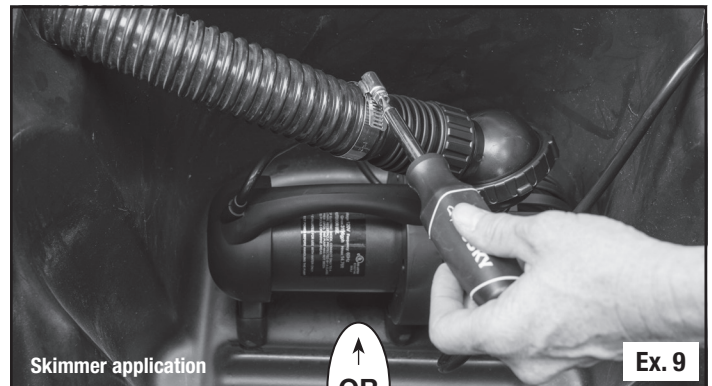
- Install the right sized multi-hose adapter based on the diameter of the tubing you are using (Ex. 7).
- If using a pipe diameter larger than the smallest section of the multi-hose adapter, trim off the smaller sections to avoid flow restriction (Ex. 8).



- In some instances the tubing may be tight or difficult to connect to the fitting. If this is the case, we recommend heating the hose with a hair dryer or dipping the hose for a few seconds in very hot water. Lubrication can also be used; we recommend silicone grease or olive oil. Put the fitting on the pump before attaching the tubing/hose. Once

the fitting is in place, attach the tubing/hose onto the fitting with a twisting motion.

- Lower the pump into the skimmer (Ex. 9) or Pondless® Waterfall Vault (Ex. 10) and rotate the rotational ball output to line up with the tubing. Attach tubing to the fitting and then tighten a hose clamp (not included) to secure tubing onto the fitting.



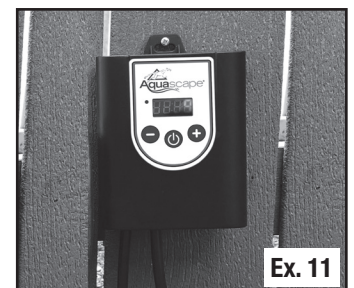
↑
OR
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IN-LINE OPERATION

- The AquaSurge pump can also be operated in-line by attaching a pipe connected directly from the pond (or aquarium) pump inlet. In this case the water must be pre-filtered of debris to prevent damage to the pump. The pump must NEVER be operated dry without water. This pump is water-cooled and requires water flowing through the pump at all times to operate correctly and stay cooled.

SMART CONTROL RECEIVER SETUP

- Mount the receiver above the ground on a post, fence, or wall (Ex. 11). Avoid installing this device in direct sunlight. Install in a cool shaded area if possible.
- Connect the pump to the Smart Control Receiver.
- Plug the Smart Control Receiver into an outdoor-rated Residual Current Device (RCD), and the unit will automatically enter pairing mode.



NOTE: The blinking blue light on the face of the unit indicates the receiver is in pairing mode and ready to be connected.

- Download the Aquascape Smart Control App (available on iOS or Android App Store).
- Open the Aquascape Smart Control App and click 'Create New Account' (Ex. 12).

NOTE: If you already have an account, login with your username and password.

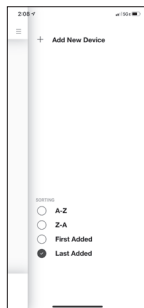
- Once logged in, click the three dashes in the upper right-hand corner of the home screen (Ex. 13).
- Click 'Add New Device' (Ex. 14).



Ex. 12



Ex. 13



Ex. 14

- Continue to follow the onscreen instructions to connect your device.

NOTE: Adequate WiFi coverage is required (2.4g networks supported).

- Continue to follow on-screen instructions to complete the pairing process.
- To reset the device to factory defaults, first turn the unit off by pressing the power button, then press and hold the + and - buttons for four seconds and release when the LED display lights up completely (Ex. 15).



Ex. 15

NOTE: This process must be completed within one minute of plugging the unit into power.

- The receiver includes a switch that allows the pump to be operated in the two following modes (Ex. 16).



Ex. 16

- Position 1 – Operated by Aquascape Smart Control App or remote control
- Position 2 – Bypass control, and operate at full flow-rate

- In the event of a power loss, the pump will revert to the last flow rate setting.

General Maintenance

- It is recommended to inspect your pump on a regular basis to make sure it is functioning properly.

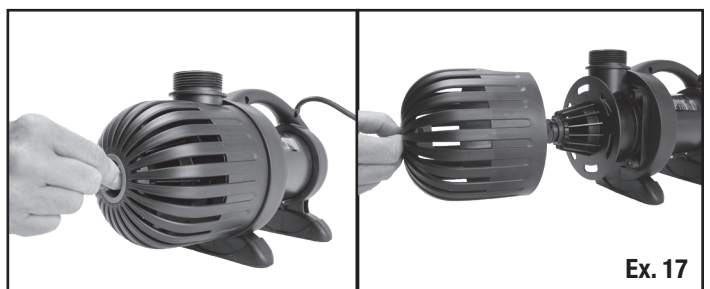
NOTE: Always disconnect the power before performing maintenance on the pump.

FILTER SCREEN CLEANING

- A filter screen clogged with debris will reduce the water flow rate.
- Remove any existing debris from the outside of the filter screen.
- In situations with excess debris buildup, the pump screens will need to be removed for a more thorough cleaning.

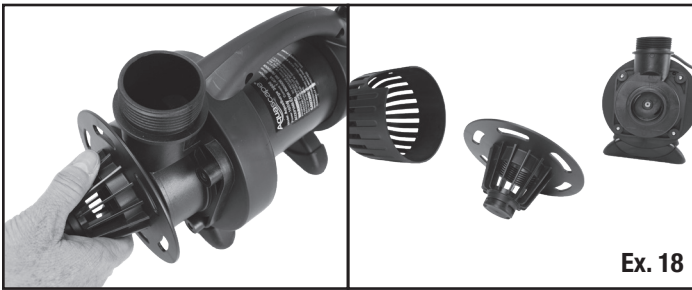
NOTE: Do not remove the outer or inner filter screens while operating the pump, as failure to do so may cause the pump to fail, voiding the warranty.

- The outer screen can be removed by twisting the locking knob counter-clockwise and pulling the screen off (Ex. 17).



Ex. 17

- The inner filter screen can be removed by unscrewing counterclockwise (Ex. 18).

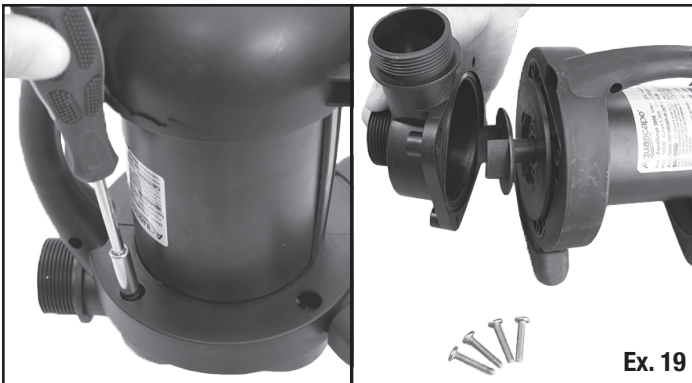


Ex. 18

NOTE: Be sure to replace the screens before operating the pump, as failure to do so may cause the pump to fail, voiding the warranty.

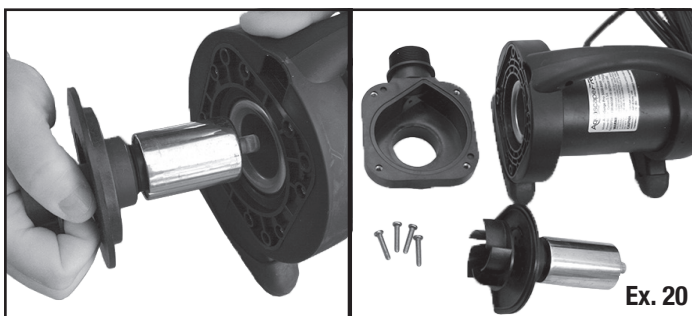
IMPELLER/ROTOR CLEANING

- Remove the four screws to disconnect the water chamber cover (Ex. 19).



Ex. 19

- Remove the impeller by pulling gently (Ex. 20).



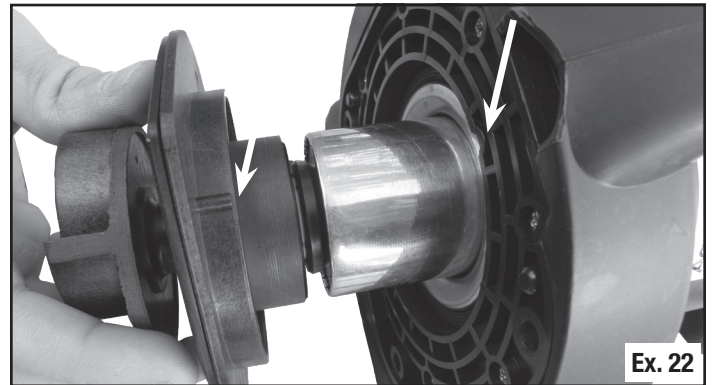
Ex. 20

- Clean the impeller and internal pump body with Aquascape Pump Cleaner Maintenance Solution (#91143), using a sponge or soft-bristle brush (Ex. 21).



Ex. 21

- Re-install the impeller, making sure the gasket is in place and the raised key on the impeller flange is aligned with the matching notch in the face of the pump flange (Ex. 22).



Ex. 22

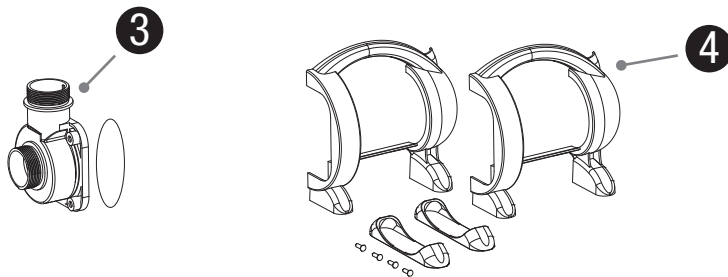
Troubleshooting

- Reduced water flow
 - Check the outer and inner filter screens
- Pump hums but doesn't push water
 - The pump or plumbing may be clogged
 - Make sure nothing is blocking the intake
 - Clean the inner and outer screens
 - Clean the impeller rotor assembly and internal pump body
 - Make sure the pump is receiving the correct voltage
 - Make sure the impeller blades are not worn or damaged
- Pump not working
 - Residual Current Device (RCD) may have tripped
 - The pump is not receiving the correct voltage
- Device won't pair
 - Make sure the outlet is receiving power
 - Make sure you have adequate wireless coverage to connect the device
 - Reset the device to factory defaults
 - Make sure the Residual Current Device (RCD) is not tripped
- Receiver displays an E1 message
 - This means the input voltage going to the receiver is greater than 142 volts. Have an electrician inspect the outlet you have the receiver plugged into
- Receiver displays an E2 message
 - Receiver is overheating - make sure the receiver is in a shady or cooler area away from direct, intense sunlight

Replacement Parts

AquaSurge 2000-4000 Adjustable Flow Pond Pump Replacement Parts	
No.	Item number/description
1.	91064 – AquaSurge 2000-4000 (G2) Intake Screen Kit
2.	91065 – AquaSurge (G2) Discharge Fitting Kit
3.	91067 – AquaSurge 4000/5000 (G2) Water Chamber Cover & O-Ring Kit
4.	91069 – AquaSurge 4000/5000 (G2) Pump Handle and Feet Kit
5.	Smart Control Receiver
6.	AquaSurge 2000-4000 Adjustable Flow Replacement Impeller Kit

AquaSurge 4000-8000 Adjustable Flow Pond Pump Replacement Parts	
No.	Item number/description
1.	45011 – AquaSurge 4000-8000 Adjustable Flow Intake Screen Kit
2.	91065 – AquaSurge (G2) Discharge Fitting Kit
3.	45014 – AquaSurge 4000-8000 Adjustable Flow Water Chamber Cover & O-Ring Kit
4.	45012 – AquaSurge 4000-8000 Adjustable Flow Pump Handle & Feet Kit
5.	Smart Control Receiver
6.	AquaSurge 4000-8000 Adjustable Flow Replacement Impeller Kit



Warranty Information

3 YEAR WARRANTY

Aquascape warrants that the AquaSurge Adjustable Flow Pond Pump will be free of manufacturing defects for three years from date of purchase. Proof of purchase required. Warranty does not cover damage resulting from electrical supply problems, improper wiring, lightning, negligent handling, misapplication, misuse, or lack of reasonable maintenance or care. Warranty does not cover parts subject to normal wear, such as impellers. This product should only be operated in fresh water, completely submerged, without corrosive chemicals like chlorine or bromine. If upon Aquascape’s inspection, the pump shows evidence of a manufacturing defect, Aquascape’s liability is limited, at Aquascape’s option, to the repair of the defect, replacement of the defective product, or refund of the original purchase price. The warranty excludes costs of labor, removal of product, shipping and expenses related to the installation and re-installation of the product. All products that include plumbing (tubing, pumps, check valves) need to be properly drained and winterized otherwise warranty is null and void. No liability for loss or damage of any nature or kind, whether arising out of or from the use of the product, whether defective or not defective, is assumed by Aquascape, Inc. or its affiliates. Aquascape shall not be liable for any incidental, consequential or other damages arising under any theory of law whatsoever.

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