

RapidFlo® Pump

Product Manual

For Models:

- RapidFlo® 3000
(Item #120970)
- RapidFlo® 4000
(Item #120971)
- RapidFlo® 5000
(Item #120978)



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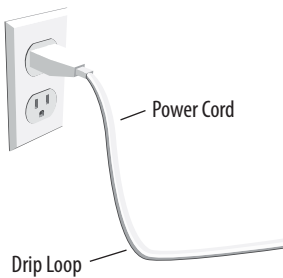


IMPORTANT INFORMATION:

Please read these instructions thoroughly before use. Failure to follow instructions may result in equipment damage or failure, losses, injury or death.

⚠️ DANGER: ⚠️

- ALWAYS use a properly grounded AC outlet. Do not immerse the RapidFlo plug in water or attempt to use a wet plug.
- Provide a “drip loop” for the power cord. This is a loop in the cord below the level of the receptacle or plug that prevents water from traveling along the cord in the direction of the receptacle.
- Be sure that a ground fault circuit interrupter (GFCI) is installed in the branch circuit supplying the pond equipment.
- NEVER remove the ground pin from the plug.
- The RapidFlo is not suitable for use in swimming pools, swimming ponds, or other situations where humans may make bodily contact with the water.
- The power cable cannot be replaced. If the power cable becomes damaged, the RapidFlo should be discarded.
- If an extension cord is necessary, a cord 14 gauge up to 100 ft. must be used. A cord may overheat if the cord is rated for less amperes or watts than the unit rating.



⚠️ WARNING: ⚠️

For your protection, always unplug the unit from the power source before installing or servicing. Should the unit appear to be not working, do not attempt to reach, remove, or disassemble before disconnecting it from the power source.

To reduce the risk of electric shock:

- Do not remove cord and strain relief. Do not connect conduit to pump.
- This pump has been evaluated for use with water only.
- Properly ground the unit to reduce the risk of electric shock.
- This pump has not been investigated for use in swimming pool or marine areas.
- Do not connect to any voltage other than that shown on the pump.
- Always disconnect from electrical outlet before handling the pump.
- Operate pump completely submerged for proper cooling. Do not let the pump run dry.

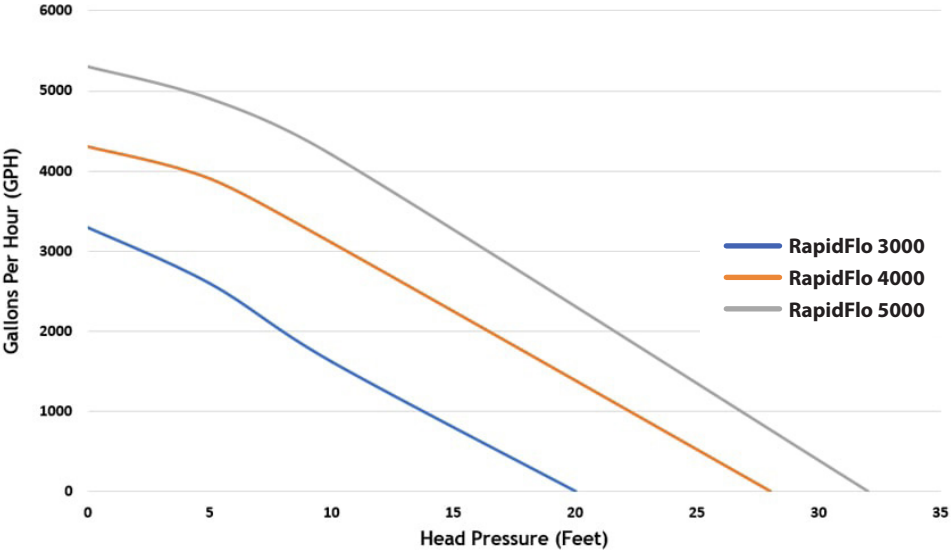
IMPORTANT:

The Pond Guy is not responsible for equipment damage or failure, losses, injury or death resulting from failure to follow safety precautions, misuse or abuse of equipment.

TECHNICAL SPECS:

MODEL	POWER	WATTAGE	MAX FLOW RATE	GPH @ 5' HEAD	GPH @ 10' HEAD	GPH @ 15' HEAD	MAX HEAD	OUTLET
RapidFlo 3000	120v 60Hz	321 Watts	3,300 GPH	2,600 GPH	1,400 GPH	900 GPH	20'	2" FPT or MPT
RapidFlo 4000	120v 60Hz	414 Watts	4,300 GPH	3,900 GPH	3,100 GPH	2,500 GPH	28'	2" FPT or MPT
RapidFlo 5000	120v 60Hz	528 Watts	5,300 GPH	4,900 GPH	4,200 GPH	3,300 GPH	32'	2" FPT or MPT

TECHNICAL SPECS: (CONT)



Package Contents RAPIDFLO PUMP

RapidFlo Pump	
A	RapidFlo Pump
B	Threaded Nipple
C	Step-Down Fitting w/Gasket

C



Tools Required: (Not included)

Kink-Free Tubing

- Check Valve Assembly
- Hacksaw
- Hose Clamps to Secure
- Flathead Screwdriver or Nut Driver

Flexible PVC Tubing

- Check Valve Assembly
- 2" MTP to Slip Fitting
- Rubber Coupler
- PVC Glue
- Primer

INSTALLING YOUR RAPIDFLO PUMP:



Step 1

Determine Tubing Type

Determine if you will be using Kink-Free tubing or Flexible PVC tubing. If using Kink-Free tubing, please see Step 2. If using Flexible PVC tubing, please see Step 5 on Page 5.



Step 2 (Kink-Free Tubing)

Install Step-down Fitting

Install the barbed step-down fitting. Ensure the gasket is tucked into the step-down fitting before screwing on to the threaded nipple.



Step 3

Trim Fitting

Cut the step-down fitting with the hacksaw to match the tubing size being used for the installation.



Step 4

Secure Fitting

Slip tubing over the barbed fitting, and secure with a hose clamp.

Now move on to Step 7 on Page 5 to continue.

INSTALLING YOUR RAPIDFLO PUMP: (CONT)

Step 5 (Flexible PVC Tubing)

Prepare PVC Tubing

Remove the pre-installed 2" threaded nipple. Install a 2" MPT to slip fitting (NOT INCLUDED) or kit components for a check valve assembly (NOT INCLUDED).



Step 6

Glue Plumbing

Dry fit your tubing before gluing permanently into place with PVC Glue and Primer. Barbed step-down fitting will not be used for a Flexible PVC installation.



Step 7

DO NOT REMOVE FLANGE!

For either Kink-Free or Flexible PVC installation, the flange held in with two screws does not need to be removed!



Step 8

Submerge the Pump

Once tubing is secure, ensure pump is completely submerged.



Step 9

Plug in the Pump

Plug the power cord into a standard 120v GFCI protected outlet.



MAINTAINING YOUR RAPIDFLO PUMP:

⚠ **WARNING:** ⚠

Before performing any maintenance, always unplug the RapidFlo pump from the power source.

GENERAL MAINTENANCE:

When a reduction in flow rate is noticed or if pump is making loud noises, proceed with initial General Maintenance.

Tools Required:

- #2 Phillips Screwdriver
- #3 Phillips Screwdriver
- Damp Cloth or Small Brush
- Clean Water



Step 1

Prepare the Pump

Unplug pump from outlet.

Pull pump out of water and conduct initial clearing of the intake basket. Ensure there is no large debris blocking suction intake.



2a

Step 2

Remove Pump Base/Intake Screen

Using a #2 Phillips screwdriver, remove the three screws from the pump base/intake screen (2a). Pull intake screen away from base (2b). It is often a good idea to set screws and small parts in a container or jar to avoid lost parts before reassembly.



2b

MAINTAINING YOUR RAPIDFLO PUMP: (CONT)

Step 3

Remove Inner Base

Using a #3 Phillips screwdriver, remove the four pump base screws (3a). Next, remove the proper rubber foot to gain access to the fifth inner pump base screw and remove it (3b). Once the inner pump base is free, remove it and set it aside (3c). Some of the screws thread directly into the acorn nuts that are seated in the top trim ring; therefore, if the nuts drop out of the trim ring, simply set them aside until reassembly.



Step 4

Remove Ball Float

Remove the ball float from the bottom side of the pump motor mounting base and set aside.



Step 5

Clean Parts

Clear debris from impeller and underbelly of pump by flushing with fresh water or wiping away with rag.



Step 6

Inspect Impeller

Using your hand, rotate the impeller clockwise to determine if impeller is seized. If able to rotate impeller with no hesitation, repeat steps in reverse order to put pump back together. If impeller is locked, please proceed to extended maintenance procedure on Page 8.



EXTENDED MAINTENANCE RAPIDFLO PUMP:

⚠ **WARNING:** ⚠

Before performing any maintenance, always unplug the RapidFlo pump from the power source.

EXTENDED MAINTENANCE:

If you've performed the General Maintenance and the unit appears to have seized, proper function of the pump motor can often be resolved by performing this Extended Maintenance Procedure.

Tools Required:

- #2 Phillips Screwdriver
- #3 Phillips Screwdriver
- Rigid Wire or Small T-handle Wrench
- Airmax® D-Scale™ Equipment Cleaner
- Rag or Scouring Pad (Green Scotch-Brite® Pad)



Step 1

Continue Disassembly

Loosen the two pump cord strain relief screws (but do not remove them) (1a). Next, remove the four top housing screws (1b).



EXTENDED MAINTENANCE RAPIDFLO PUMP:

Step 2

Remove Motor Housing

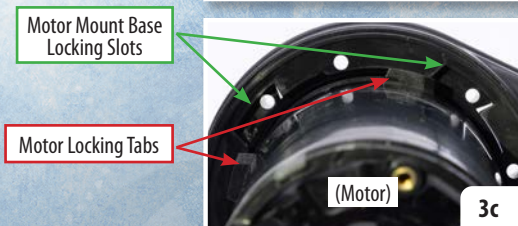
Lift the top housing from the unit (2a). Then with one hand on the internal pump cord, slide the housing away to allow room to work on the unit without interference from the top housing (2b). Next, slide the stainless steel body up and away from the lower trim ring (2c).



Step 3

Release Motor From Assembly

With the unit on its side (or upside down) remove the position lock screw from the motor mount base (3a). Then slide the trim ring up and away from the base (3b). Next, rotate the motor mount base ¼ turn counterclockwise to release it from the motor mount locking tabs (3c).



EXTENDED MAINTENANCE RAPIDFLO PUMP:



Step 4

Remove Motor

Now that the motor is free, remove the rotor and impeller assembly from the stator.



5a



5b

Step 5

Begin the Cleaning Process

At this point, you may want to use a pair of latex or other rubber-based gloves to protect your skin during the cleaning process.

Liberaly apply Airmax D-Scale to the rotor and stator (5a). You may even want to remove the spray tip from the bottle and pour 6–8 ounces directly into the stator and let it foam for 5–10 minutes in order to break down any scale and buildup (5b). Use a Scotch-Brite pad or abrasive sponge to thoroughly clean debris and buildup on the rotor and inside the stator. Repeat as needed until all debris and scale buildup is removed.

NOTE: Be sure to rinse all components with clean water after using the D-Scale.

EXTENDED MAINTENANCE RAPIDFLO PUMP:

Step 6

Clean Rotor Shaft & Rotor Ports

Liberally apply Airmax D-Scale to the rotor, and if possible, use a rigid wire (6a) or small T-handle wrench to clear any debris that may be plugging the rotor shaft and rotor ports (6b). Clearing the rotor is important as it assures proper water flow in and out of the motor for cooling and lubrication (6c).



Step 7

Begin Reassembly

When ready to reassemble the unit, be sure that the motor O-ring is seated properly (it can be cleaned beforehand if necessary). At this stage, it is also helpful to coat the O-ring, rotor, and stator with a light silicone lubricant if possible. Coating with silicone lubricant is more important when winterizing than it is when the pump is going to be placed back in the pond within the next 24 to 48 hours.

NOTE: Do not use lithium grease or other heavy lubricants.



EXTENDED MAINTENANCE RAPIDFLO PUMP:



Step 8

Ensure Proper Alignment

Place the rotor and impeller assembly back inside the stator, ensuring that the large and small holes (8a) on the bearing holder seat properly on the corresponding nubs on the motor; otherwise, the motor mounting base will not fit correctly (8b).



Step 9

Install Base

Reinstall the motor mounting base, making sure that, when locking it in by turning $\frac{1}{4}$ turn clockwise, the discharge and pump motor cord are opposite each other.



Step 10

Install Trim Ring

Slide the trim ring back down against the motor mounting base, and insert all four acorn nuts.

NOTE: Be sure to check that the impeller spins freely by hand before completing the reassembly.



Step 11

Install Position Lock Screw

With the unit on its side (or upside down) reinstall the position lock screw into the motor mounting base.

EXTENDED MAINTENANCE RAPIDFLO PUMP:

Step 12

Reinstall Motor Housing

Slide the stainless steel body down and onto the lower trim ring (12a). Holding the top housing with one hand and the internal pump cord in the other, slide the top housing back down the cord, onto the stainless steel body (12b).



Step 13

Assemble Base

Reinstall the four top housing screws (13a). Tighten the two pump cord strain relief screws (13b). Set the ball float back into the bottom side of the pump motor mounting base (13c).

NOTE: Do not over-tighten any screws during reassembly. Screws should be snug but not so tight that they could cause the plastic to crack.



If you find any broken or damaged parts during the disassembly or cleaning process or for additional help, please contact The Pond Guy Technical Support at (586) 589-7422.

EXTENDED MAINTENANCE RAPIDFLO PUMP:

Step 14

Secure Inner Base

Align the inner pump base and the bottom of the pump (14a). Using a #3 Phillips screwdriver, insert and tighten the fifth inner pump base screw under where you removed the rubber footing in Step 3 on Page 7 (14b). Secure the rubber footing over the screw hole (14c). Insert and tighten the four remaining pump base screws.



14a



14b



14c

Step 15

Reinstall Pump Base/Intake Screen

Align the pump base and intake screen (15a). Using a #2 Phillips screwdriver, insert and tighten the three screws for the pump base/intake screen (15b).



15a



15b

NOTES:

Lined area for notes.

TROUBLESHOOTING:

Pump does not turn on.

- Power cord not connected.
- Circuit breaker tripped.
- Faulty GFI.

Pump turns on then shuts off.

- Pump is getting hot due to low water level or because intake is clogged.
- Pump is plugged into an extension cord resulting in low voltage.

Reduced water flow.

- Pump is plugged with debris.
- Intake is clogged with debris.
- Tubing is clogged with debris.
- Low water level.

PRODUCT WARRANTY:

The Pond Guy will repair or replace any RapidFlo found to be defective within 3 years of the original purchase date. This limited warranty is extended exclusively to the original purchaser beginning from the date of original receipt. Abuse or misuse of this product or power cord alterations void all warranty. In case of warranty claims, the product must be returned to place of purchase accompanied with the original receipt.

THANK YOU FOR CHOOSING:

The Pond Guy® Inc.

We Know Ponds™

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