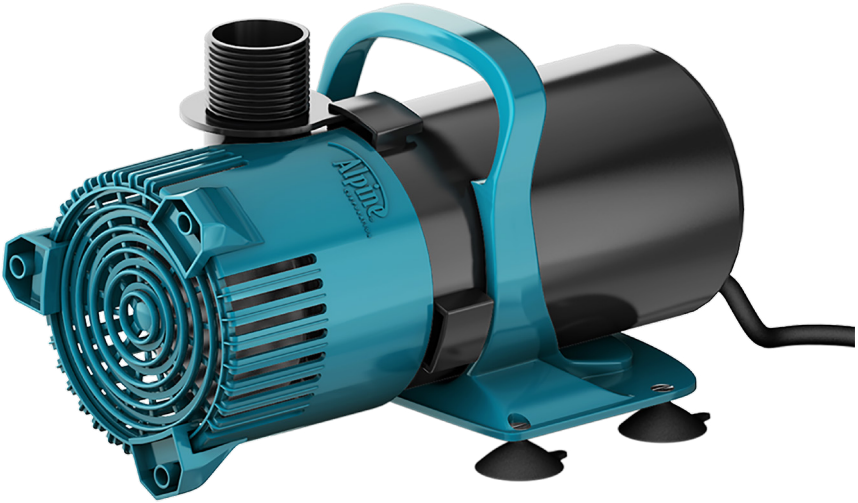
Owner's Manual

Item #s: PEG1800, PEG3000, PEG4700, PEG5600

Alpine® CORPORATION

VORTEX™ PUMPS



Have Questions or Issues? Need help with assembly?
Contact us and we will resolve them within 12 hours.

Support Hours: M-F 7:30-5:00 (U.S. Pacific Time)

Call:	Text:	Email:
877-460-4511	323-201-4431	info@alpine4u.com

v1.0

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INTRODUCTION

Thank you for purchasing one of Alpine's Vortex Pumps.

At Alpine, our goal is to supply our customers with quality products that provide convenience and value to your life. We hope you enjoy your purchase and thank you for choosing Alpine: Your One Stop Shop for all your Solar, Gift, Garden and Pond Supplies.

Our new Vortex™ submersible water pumps combine value and versatility, making them the top pick for owners of ponds of all sizes. The Vortex™ can be used in or out of the water and placed vertically or horizontally for maximum flexibility.

The included adapters fit multiple pond set-ups from 1.25" up to 2" connector outlets. This pump is equipped with a pre-filter cage which handles solids up to a quarter inch in size. Place the pump in the included mesh bag to prevent damaging debris from entering your pump and keep maintenance to a minimum.

Your Alpine Vortex™ pump is oil-free, magnetic-driven and is epoxy protected, with a ceramic shaft for long lasting dependable performance backed by a Three-Year Warranty.

The pump features simple maintenance, with a removable rotor assembly, To keep your pump in optimal condition, Alpine suggests that once a week, you verify that the pump is performing satisfactorily.

If you detect a drop in pump performance (such as a decrease in water flow from the pump or to the waterfall), first clean the pump's pre-filter cage and the tubing connected to the pump. If the water flow is still not fully restored to its original performance, simply clean the impeller and internal pump body.

SAVE THESE INSTRUCTIONS: This manual contains important instructions that should be followed during installation, operation, and maintenance of the product.

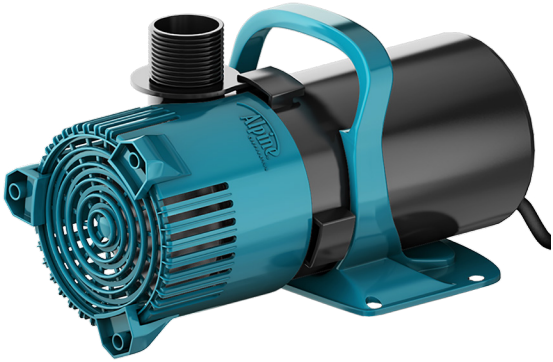
SAFETY INFORMATION

WARNING: Risk of electric shock – This pump has not been approved for use in swimming pool or bodies of salt water.

WARNING: To provide continued protection against risk of electric shock, connect to properly grounded, ground fault circuit interrupter (GFCI) outlets only, using the following guidelines:

- Read and follow all safety instructions and all the important notices on the appliance before using the pump. Failure to do so may result in loss of fish life and/or damage to this appliance.
- Have a qualified electrician install a properly grounded receptacle outlet, acceptable for outdoor use and protected from snow and rain.
- Any wiring of pumps should be performed by a qualified electrician to ensure code compliance and user safety.
- This is a pond pump. Do not use this pump for other than intended use (i.e.: do not use in swimming pools, aquariums, etc. Not to be used as a sump pump.)
- Do not use this pump in swimming pools or other situations where people are immersed.
- If an extension cord is necessary, ensure connection is watertight and dust proof. A cord with proper rating should be used. A cord rated for less amps or watts than the appliance rating may overheat. Arrange the cord so that it will not be tripped over or pulled. The connection should be carried out by a qualified electrical installer.
- Unplug pump at receptacle outlet when not in use or before removal from pond.
- 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.
- Inspect the power cord before using and protect to avoid punctures, cuts, bruises and abrasions. Never cut the cord.
- Never handle power cords with wet hands.
- To avoid injury, do not touch moving or hot parts.
- Do not use power cord to lift pump.

WHAT'S INCLUDED



Vortex™ Pump
x1

Mesh Bag
x1

PEG1800 / PEG3000
Hose Adapter x1
Fits 1.25" and 1.5" Tubing

PEG4700 / PEG5600
Hose Adapter x1
Fits 1.5" and 2" Tubing

Rubber Suction Feet
x6 (2 Extra)

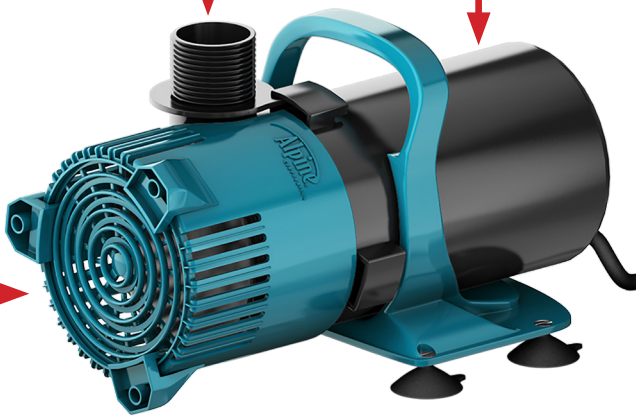
FEATURES

Orient vertically or horizontally for maximum flexibility.

Energy efficient and easy to maintain.

Easy installation. No tools needed to install adapters.

Operates on Land or Fully Submerged.

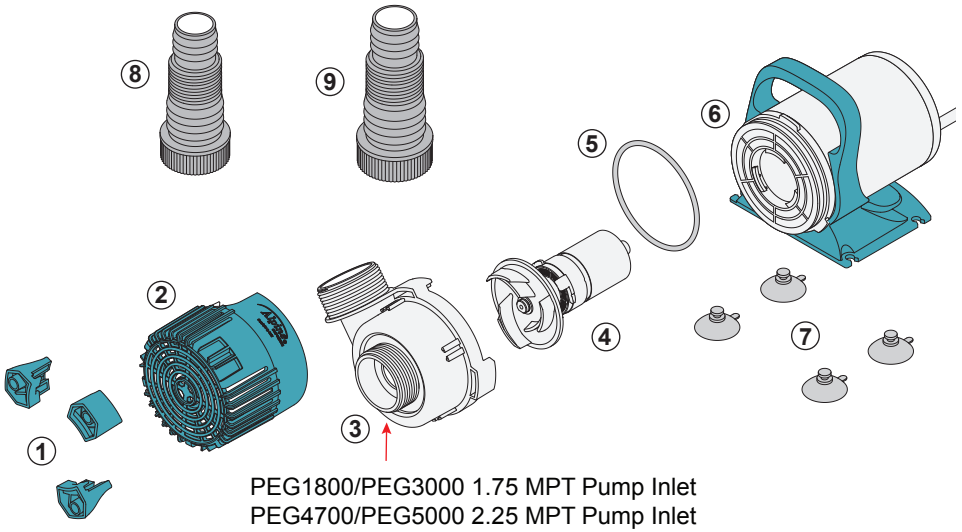


Snap off Pre-Filter Cage for easy cleaning.

SPECIFICATIONS

Item #	Amps (Min - Max)	Watts (Min - Max)	Max Flow GPH	Max Height	Outlet Connection	Cord Length	GPH Flow Rate			
							5’	10’	15’	20’
PEG1800	0.8	96	1800	13.7 ft	1.5"	20 ft	1231 4659	587 1169		
PEG3000	1.1	132	3000	14.8 ft			1997 7559	1169 4425		
PEG4700	1.8	216	4700	18.5 ft	2”		2890 10940	1852 7011	851 3221	318 1204
PEG5600	2.7	324	5600	22.5 ft			3998 15134	2901 10981	1873 7090	701 2654

COMPONENT AND PUMP PARTS



PEG1800/PEG3000 1.75 MPT Pump Inlet
PEG4700/PEG5000 2.25 MPT Pump Inlet

1. Pre-filter Cage Removable Feet
2. Pump Pre-filter Cage
3. Pump Body Cover
4. Impeller
5. O-Ring
6. Pump Body with Handle
7. Rubber Suction Feet
8. PEG1800/PEG3000 Multi Hose Adapter Fits 1.25” - 1.5” Tubing
9. PEG4700/PEG5000 Multi Hose Adapter Fits 1.5” - 2” Tubing

REPLACEMENT PARTS

Alpine Pump SKU#	Alpine Replacement Part	Description
Impeller		
PEG1800	PEG1800-IMP	Impeller for PEG1800
PEG3000	PEG3000-IMP	Impeller for PEG3000
PEG4700	PEG4700-IMP	Impeller for PEG4700
PEG5600	PEG5600-IMP	Impeller for PEG5600
O-Ring		
PEG1800 / PEG3000	PEG1830-OR	O-Ring for PEG1800 / PEG3000
PEG4700 / PEG5600	PEG4756-OR	O-Ring for PEG4700 / PEG5600

INSTALLATION GUIDELINES

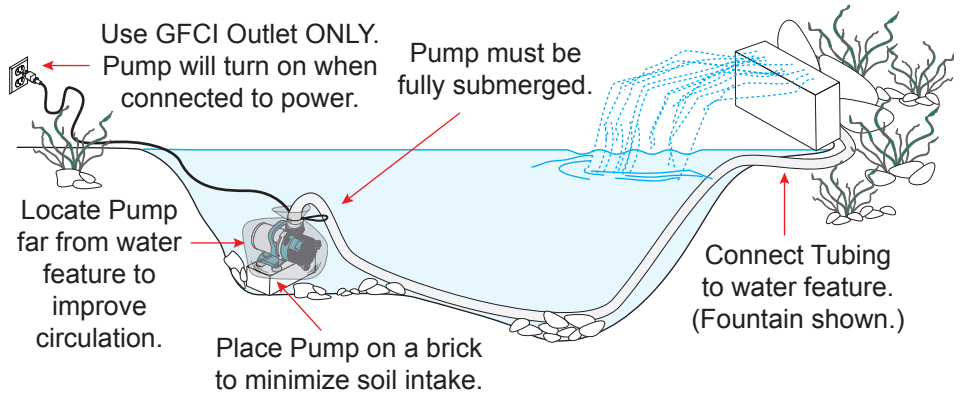
IMPORTANT: Only operate the pump when it has water running through it. Failure to do so will overheat the pump and cause it to fail, thus voiding the warranty. **DO NOT OPERATE DRY!**

- You must prime the pump before plugging it in and turning it on. Priming a pump means to feed water into the tubing both in and out of the pump, to help create a suction effect to draw the water from the source. Failure to do so may cause your pump to run dry, because of air in the system- which could cause the pump to appear not to be working and will eventually burn out the pump altogether. Remember, running a Vortex™ pump dry voids the warranty!
- Be sure that the pre-filter cage is fully snapped shut. Failure to operate the pump without the pre-filter cage on will allow large debris to enter the pump, causing the pump to fail and voiding the warranty. To protect your fish or other pond wildlife from being sucked into the pump, it is highly recommended to not operate the pump without the pre-filter cage on.
- Do not wear loose clothing that may become entangled in the impeller or other moving parts during installation.
- Keep clear of inlet and outlet openings. DO NOT insert fingers in pump with power connected.
- Do not pump hazardous materials or liquids, such as oil, saltwater or organic solvents.
- Be sure no debris will block or restrict the pre-filter cage from water entering.
- Place the pump in the included mesh bag to further protect it from gathering debris. Tighten the drawstring firmly around the tubing and power cord.
- The threaded collar on the adapter enables the Vortex™ pump to be installed and removed without the need for any tools. **Do not use tools to attach the adapters onto the pump outlet as the tool might break the adapter.** Adapters to be hand-tightened only.
- When using the pump in external figurations, use a wider pipe on the inlet than the tubing on the outlet. Adding a check valve to the end of the pipe in the pond will prevent the pump from pulling air upon startup and prevent motor burnout.
- The Adapters can be rotated to five positions for ease of installation. See Page 16 for details.

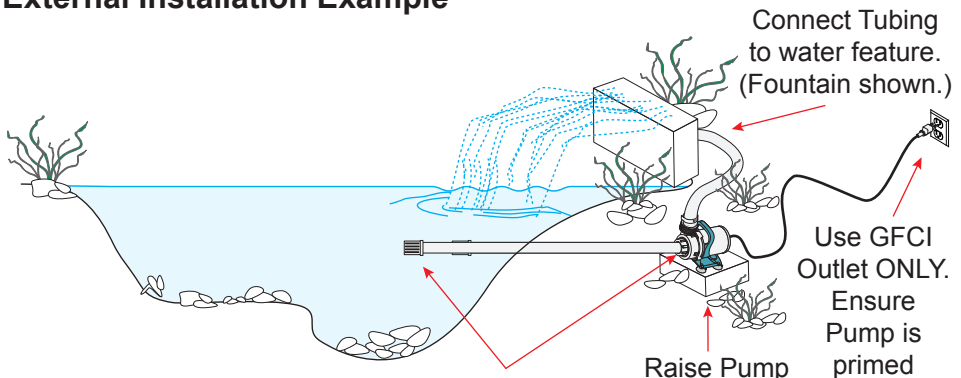
TYPICAL INSTALLATION: PUMP PLACEMENT

- The Vortex™ pump is designed to be either submerged directly into the pond or placed out of the pond as long as water is running through the pump.
- To maximize pond circulation, locate the pump as far away as possible from the location of the water entering back into the water feature.
- The pump should be placed a maximum depth of 6.5 feet (2 meters). Bricks or stones can be used to raise the pump up off bottom of the pond.
- Do NOT position the pump in the deepest area of the pond. This will protect the fish from suffocating by preventing the pond from completely draining in case of a leak in the tubing.

Submersible Installation Example



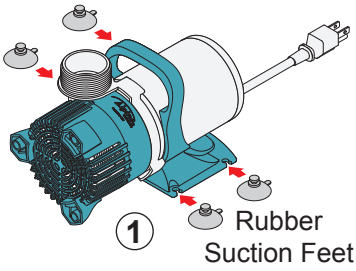
External Installation Example

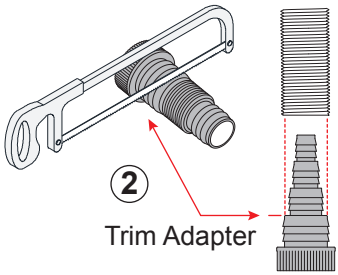


Remove Pre-Filter Cage and connect suction hose. See Page 8 for inlet sizes. Position pump below water level and use check valve at end of pipe. NOTE: Check valve prevents primer motor burnout.

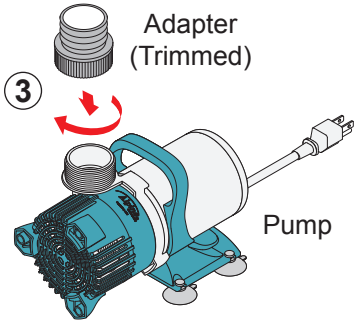
TYPICAL INSTALLATION: TUBE CONNECTIONS

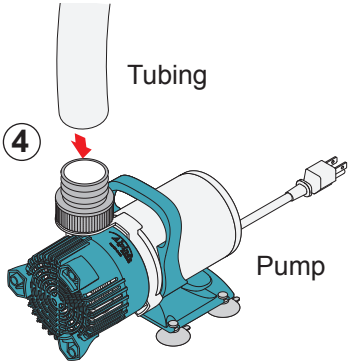
1. When using the pump in the horizontal position, install the rubber suction feet.
2. The included adapter is designed to accommodate a range of tubing diameters. We recommend using the largest tubing size recommended for your pump for maximum flow. Trim the smaller sections with a hacksaw to avoid any flow restriction.





3. A flat rubber washer seal is included for a hand-tight and leak-free connection. Hand tighten only.
4. Attach the tubing to the multi-hose adapter. If the tubing is loose on the adapter, use a hose clamp (not included) to secure the tubing to the fitting.

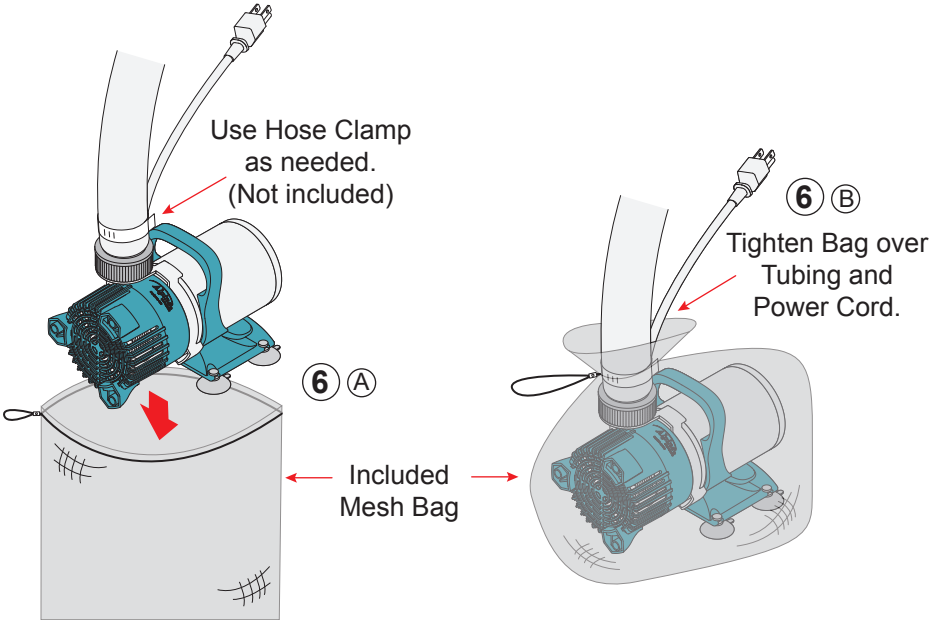




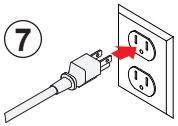
TYPICAL INSTALLATION: TUBE CONNECTIONS

5. Connect the other end of the pump tubing to an Alpine pond filter, waterfall, or water feature.
6. Place the pump in the mesh bag and securely tighten the drawstring around the tubing and power cord.

NOTE: The mesh bag will decrease maintenance and extend the life of your pump by protecting it from gathering debris.



7. Place the pump into your water feature. Be sure it is fully submerged before plugging into a properly grounded GFCI (ground fault circuit interrupter) outlet. After the pump is running and water is circulating through the filter(s) or waterfalls, check for any fitting or waterfall leaks where the external connections are made.



Plug into GFCI Outlet
to turn on.

IMPORTANT: The pump turns on as soon as it is connected to power. Disconnect from the power source to turn off. Make sure the pump is fully submerged and filled with water before connecting to power.

MAINTENANCE

WARNING: Always unplug or disconnect all appliances in the pond from the electrical supply before installing, repairing, maintaining or handling equipment in the water.

To prolong the life of the pump, follow these simple maintenance procedures:

- Place the pump inside the included mesh bag to protect it from damaging debris and reduce maintenance. Ensure the drawstring is fully closed around the tubing and power cord.
- Once a week, verify the pump performance is satisfactory. If you detect a drop in pump performance (such as a decrease in water flow from the pump or to the waterfall) first clean the mesh bag and the pump's pre-filter cage and tubing. If the water flow is still not fully restored to its original performance, clean the impeller and internal pump body.
- This pump is suitable for use in water temperatures from 32 to 95 degrees Fahrenheit (0 to 35 degrees Celsius). Remove and store the pump if temperatures are not
- To keep the pump in optimal working conditions, always replace any worn parts.

CLEANING THE PRE-FILTER CAGE

WARNING: Always disconnect the power before performing maintenance on the pump. Do not remove the pump's pre-filter cage while operating the pump.

IMPORTANT: Failure to operate the pump without the pre-filter cage or operating the pump with a broken cage will allow large debris to enter the pump causing damage to the pump and void the warranty.

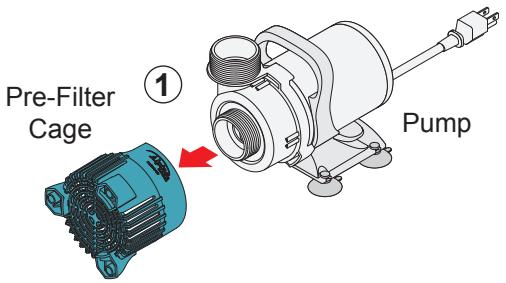
1. Inspect your pump on a regular basis to ensure it is functioning properly. If you notice the water flow rate diminish, debris in the mesh bag or the pump's Pre-filter cage may be causing blockage.
2. Unplug the pump from the power and remove it from the pond.
3. Remove any debris caught on the mesh bag and take the pump out of the mesh bag. Rinse any other dirt off the bag with a garden hose. Remove debris caught in the Pre-filter cage and rinse clean.
4. Place the clean pump back inside the mesh bag and securely tighten the drawstring before replacing it in the pond.

CLEANING AND REPLACING THE IMPELLER

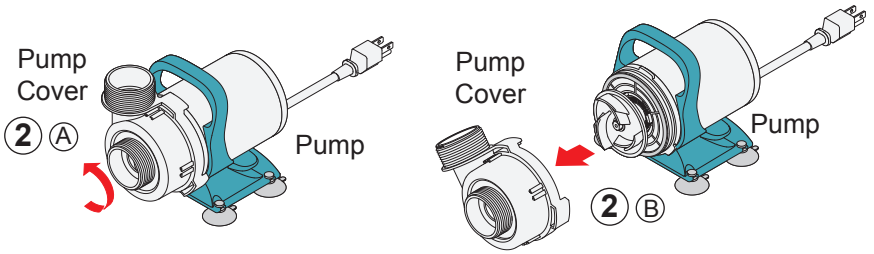
If you have thoroughly cleaned the mesh bag and pre-filter cage and still have diminished flow rates, then you will need to remove and inspect the impeller and internal pump body.

IMPORTANT: The pump impeller includes a high quality ceramic shaft that provides long-lasting, reliable performance when properly maintained. However, extreme care should be taken when handling the shaft during maintenance. Avoid dropping or pressing too hard on it to avoid breakage or hairline fractures, which may cause the shaft to snap while in operation.

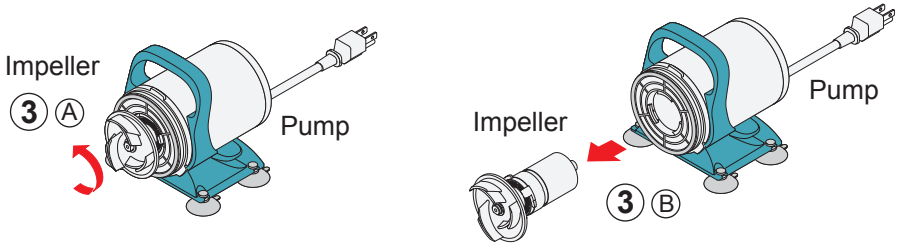
1. Remove the pre-filter cage by pulling it off the front of the pump.



2. Twist the pump cover to the left until the slots at the back clear the tabs at the front pump body. Remove the pump cover from the pump body.

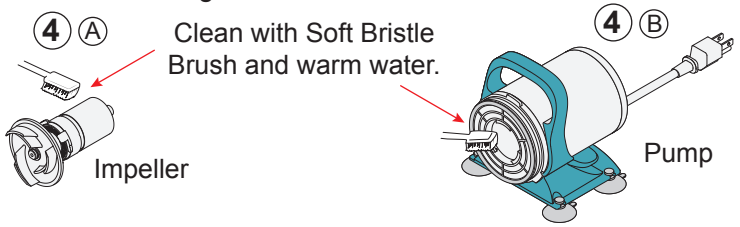


3. Twist the impeller to the left until the tabs clear the slots on the inner pump body. Remove the impeller from the pump body.

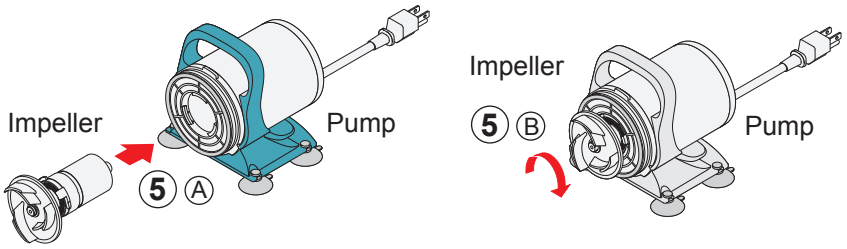


CLEANING AND REPLACING THE IMPELLER

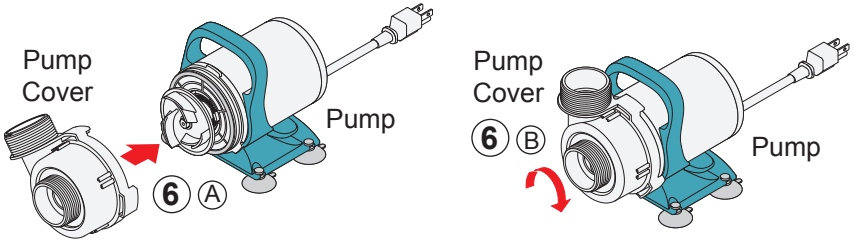
4. If your impeller and internal pump body have excessive scale build-up, soak with any cleaning solution that removes calcium, lime and rust. Rinse with warm water and a sponge or soft-bristled brush that won't scratch the stainless steel. Removing scale build-up will allow your pump to run like new again.



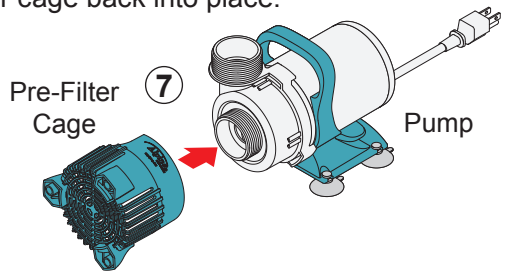
5. After the Impeller and internal body are cleaned. Place the impeller back into the pump body and twist to the right until it clicks into place.



6. Place the Pump Cover 45 degrees to the left on the pump body and twist to the right to lock into place.

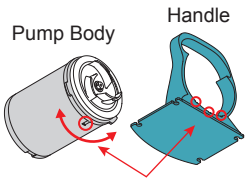


7. Slide the pre-filter cage back into place.

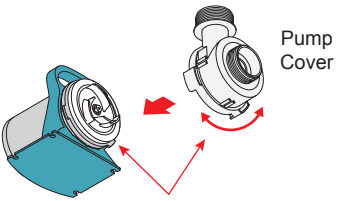


ADJUSTING THE ADAPTER ANGLE

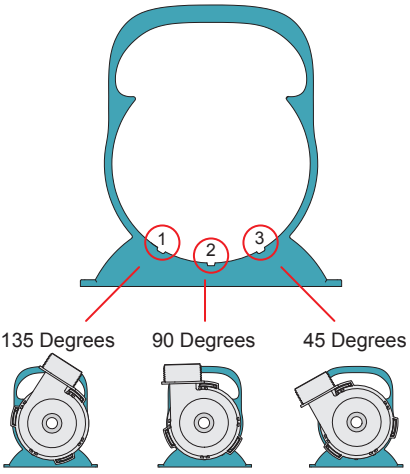
The Vortex Pump can be adjusted with the adapter in 5 positions shown below. Follow Steps 1 and 2 below.
NOTE: Turn the Pump Cover upside down for 0 Degree position.

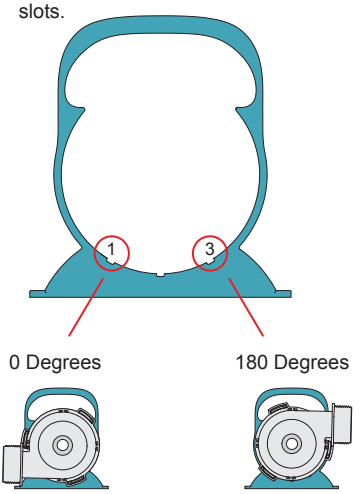


Step 1: Rotate Pump Body so Notch fits in one of three slots in bottom of Handle.



Step 2: Fit Pump Cover on Pump Body and rotate until body tabs snap into cover slots.





For 0 Degree turn Pump Cover upside down.

WINTER PUMP CARE

In cold climates, Alpine highly recommends to store your pump inside during the coldest months of the year. You may still use your Vortex™ pump during the winter time, but cannot be used in below freezing temperatures. This pump is suitable for use in water temperatures from 32 to 95 degrees Fahrenheit (0 to 35 degrees Celsius).
Please follow the steps below:

1. Disconnect the power cord plug from the power supply.
2. Disconnect any tubing connected to the pump.
3. Follow the steps on Pages 14 and 15 to Clean and Replace the Impeller to clean your pump so it will be ready for use again. Store the pump in a frost-free location until the weather permits.

TROUBLESHOOTING

If Your Pump Has Reduced Water Flow

- Pump or tubing may be clogged, check area around pump to be sure there is no debris blocking water from entering into the pump.
- It may be necessary to clean the pump pre-filter and impeller. For instructions on how to clean your pump please turn to pages 13 - 15.
- If none of the above solve your issue, the impeller needs to be replaced.

If Your Pump Hums And Doesn't Push Water

- Pump or tubing may be clogged, check area around pump to be sure there is no debris blocking water from entering into the pump.
- It may be necessary to clean the pump pre-filter and impeller. For instructions on how to clean your pump please turn to pages 13 - 15.
- Make sure the pump is receiving the correct voltage.
- If none of the above solve your issue, the impeller needs to be replaced.

If Your Pump Has Completely Shut-Off

- The ground-fault circuit interrupter (GFCI) may have tripped.
- Check the temperature of the water to ensure it's within the working temperatures.
- It may be necessary to clean the pump pre-filter and impeller. For instructions on how to clean your pump please turn to pages 13 - 15.
- If none of the above solve your issue, the impeller needs to be replaced.

If Your Pump Turns On And Off

- Pump or tubing may be clogged, check area around pump to be sure there is no debris blocking water from entering into the pump.
- It may be necessary to clean the pump pre-filter and impeller. For instructions on how to clean your pump please turn to pages 13 - 15.
- Check the temperature of the water to ensure it's within the working temperatures.
- If none of the above solve your issue, the impeller needs to be replaced.

DISPOSAL

Do not dispose of this unit with domestic waste! Disable the unit beforehand by cutting off the cables. Preserve our environment by recycling or disposing this product in accordance with local, state and federal guidelines.

Never open, mutilate, or short-circuit the pump as this could result in injury.

LIMITED 3 YEAR WARRANTY

Thank you for choosing an Alpine product! We aim to please with our wide range of products including Fountains, Birdbaths, Statuary, Pond Supplies & More. All of our products are constructed from the highest quality materials. In the event that we have not achieved our usual standard of excellence, we will repair or replace, at our discretion, within the warranty period. A valid proof of purchase, with the purchase date clearly indicated, must be provided. Photos of defective merchandise will also be required to help distinguish the actual cause of the defect. Please read below for a detailed description of warranty coverage.

Water Damage

Alpine products are not manufactured to withstand extreme temperatures. Improper storage that allows water to freeze within a product may cause damage, is considered negligence, and will not be covered under this warranty. The use of "hard water," and/or caustic cleaners, can affect the painted or other finishes. Failure to keep the unit clean, and use of such additives/cleaners, will also void the warranty. Please note: for fountains, it is normal for some splashing to occur and protecting the immediate surfaces is not the responsibility of Alpine Corporation.

Paint & Color (Retention and/or Loss)

The use of water will cause natural erosion to the color. This area can be touched up using standard paint. The paint is designed to protect the entire finish against breakdown of color. As with any product, all finishes with time will gradually fade and discolor. The warranty will only cover against severe or complete fading, within the first year from date of purchase, with the above exclusion.

Procedure/Service

Should a warranty/claim be needed, you should contact the retailer from whom you purchased the product. If that is not an option, you can contact Alpine Corporation at www.alpine4u.com. When contacting Alpine Corporation, you must be prepared to show proof of purchase, provide photographs and any other information needed to validate your claim. This may be necessary to distinguish between a partial or complete replacement of a defective product. The warranty does not cover any items with multiple parts; the warranty will ONLY cover the individual component of the unit/item that may be defective. Replacement parts can be made available to a consumer through the original selling party, or an approved parts retailer. If this is not an option, contact our customer service department. ***Item is covered under three year limited warranty from the date of purchase. If your purchase was after our 30-day grace period, payment information will be requested for shipping, tax and duty charges.***

Not Covered Under Warranty

The limited warranty will NOT cover cases of damages due to:

1. Inadequate care and/or neglect
2. Environmental and/or natural elements
3. Immersion in water, unless specified
4. Improper Installation/Storage and/or Maintenance

This warranty is void if the product has been damaged by accident, misuse, negligence, improper installation and/or modifications have occurred. This includes any and/or all defects arising out of freezing water damage, hard water damage, failure to keep the unit clean and free of harmful additives such as bleach, chlorine, etc…. which affects the paint and/or parts. This warranty also does not cover any additional charges or installation, removal, disposal and/or shipping costs or consequential damage associated with any warranty claim.

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