



Owner's Manual for **Small Aeration System** **S.A.S**



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IMPORTANT SAFETY INSTRUCTIONS

WARNING!

- Always use caution when near water.
- The owner assumes the risks related to the use of a Small Aeration System.
- Do not use waders in deep ponds/lakes, and where slopes are steep and/or muddy because of the risks of drowning if they get filled with water.
- Use a stable boat such as flat bottom for installation and avoid using a canoe or kayak. Follow all boating safety rules and regulations, always wear a personal floating device.
- Consult a qualified electrician for electrical installation.

COMPONENTS

- Hiblow Compressor (#1)
- Adapter (#2)
- Manifold (#3) (Optional)
- Torpedo self-sinking air feeder lines (#4) (one or two) (length will vary)
- Piccolo diffuser (#5) (one or two)
- All other required hardware (clamps and unions) (#6)



SAS 1	SAS 1XL
	
SAS 2	SAS 2 XL
	

REQUIRED TOOLS

For installation of the Small Aeration System, you will need:

- A Screwdriver.
- A knife.
- A Boat.
- If no boat, prepare 2 ropes, see details on page 7.

SYSTEM INSTALLATION

The compressor must remain turned off and disconnected until all connections are completed. Multiple connections are required to assemble the Small Aeration System (S.A.S.). Use the hardware and fittings provided for a leak-free connection and follow the instructions below.

STEP 1 – COMPRESSOR

Connect the barbed part of the adapter (Picture #1) to the compressor's output. This adapter will allow you to connect the tubing on the next step. The elbow (Picture #2) included in the box from the manufacturer, will not be used in the connections of the Small Aeration System.

Choose a location for your compressor far enough from the shore to avoid potential flooding and on a flat surface to reduce vibration. CanadianPond recommends protecting your compressor from the elements to extend its lifetime by installing it in a well-aerated cabinet or a ventilated shelter. Do not put the compressor in the water. The compressor is not waterproof.

The S.A.S. can operate during winter. If your system is not operational during winter, the compressor needs to be disconnected from the airline and placed in an indoor temperate place. We strongly recommend to not leave your compressor outside in winter if it is not operating.



STEP 2 – TORPEDO TUBING CONNECTIONS

Option 1: System with manifold

If you purchased a Small Aeration System with one diffuser, your system will not require a manifold connection. Proceed to step 3.

Locate the supplied manifold (Picture #3) and clamps. Insert a clamp to one end of the Torpedo tubing. Insert the tubing over the barbed adaptor of the compressor. Tighten the clamp around the Torpedo tubing using a screwdriver.

Cut the torpedo tubing with a knife at a required lengths to cover distance between compressor and manifold, we suggest a minimum of one-foot length, make sure to leave some slack. Leave the manifold close to the compressor and



keep it off the ground, ice and other environmental conditions that can cause damage.

Connect the manifold to the compressor using the Torpedo and clamps. Insert a clamp to the other end of the torpedo tubing you just cut. Insert the tubing over the barbed connector of the manifold inlet (Picture #3) and tighten the clamp around the torpedo tubing using a screwdriver.

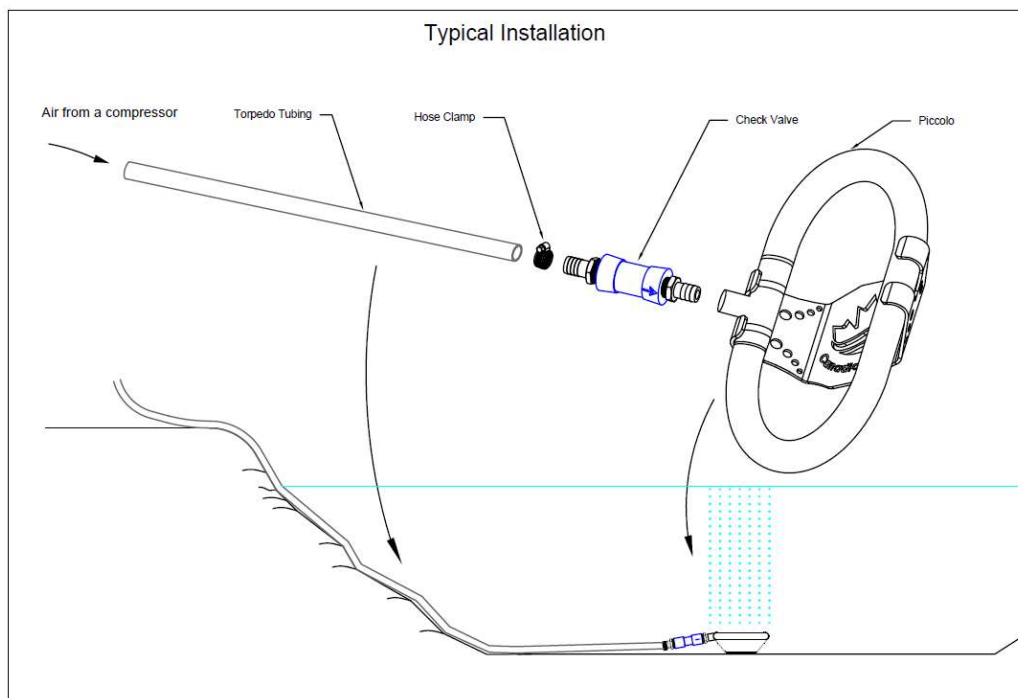
Using the same technique, connect 2 torpedo tubing to the manifold outlets with clamps (Picture #4). Uncoil Torpedo hose towards the water. The function of Torpedo is to bring the air from the compressor to the diffuser in the water.



Option 2: System without manifold

If you bought a system with only one diffuser, please follow this step.

Once the air compressor is in place, insert a clamp to one end of the Torpedo feeder line, insert the tubing over the barbed connector already installed to the compressor at step 1 and tighten the clamp around the Torpedo tubing using a screwdriver. Uncoil Torpedo hose towards the water. The function of Torpedo is to bring the air from the compressor to the diffuser in the water. *Do not cut the excess of feeder lines except if you are installing a manifold.*

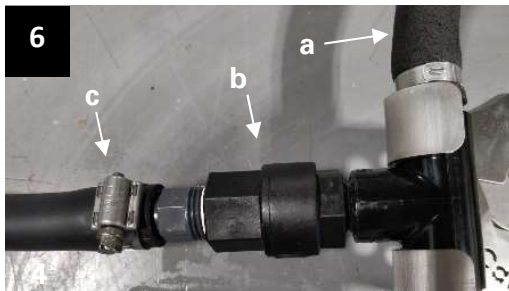


Note: Piccolo diffuser should be installed at the deepest point of your pond.

STEP 3 – PICCOLO DIFFUSER CONNECTION

The diffuser is already installed on its base as shown on the previous page. The check valve is rotated inward for shipping purpose only, rotate the valve outward. (Picture #5)

Insert a clamp to the Torpedo feeder line, insert the tubing over the barbed portion of the check valve and tighten the clamp around the Torpedo tubing using a screwdriver. (Picture #6)



- a. Piccolo Diffuser
- b. Check Valve
- c. Clamp

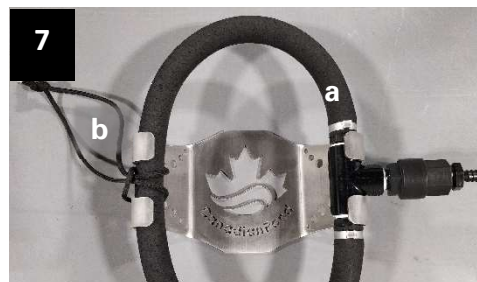
STEP 4 – INSTALLING SYSTEM IN WATER

Option 1: With a boat

The Piccolo Diffuser is self-sinking and designed to settle on its base. It requires no additional weight. Start the compressor right before descending Piccolo in the water. The bubble column will help guide you to settle the diffuser at the desired location. Simply drop the diffuser at the desired location. Piccolo diffuser should be installed at the deepest point of your pond.

Option 2: Without a boat

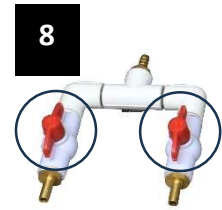
To install the diffuser without a boat, use a long rope (twice the length of the pond) and a small cord (1 to 2 feet long). Form a loop to the diffuser using the small cord (see letter b in picture #7). Pass the long rope through this loop, and while holding both ends of the long rope, use it to pull the diffuser into place in the water. The diffuser will sink into place at the bottom of the water. A second person should be hanging on the feeder line to help with the placement of the diffuser. Once in line with the wanted position, release one end of the long rope and pull on the other end to retrieve your rope. Piccolo diffuser should be installed at the deepest point of your pond.



- a. Piccolo Diffuser
- b. Loop for the installation

STEP 5 - ADJUSTING MANIFOLD

Follow this step if your system has more than one diffuser. If you purchased a Small Aeration System with one diffuser, your S.A.S. will not require a manifold adjustment. Once the system has started, the airflow in each line may not be uniform. This is completely normal, as some diffusers may have more restrictions than others (ex. deeper, longer feeder line, etc.). To make sure that each diffuser gives off the same amount of airflow simply adjust the manifold's valves (Picture #8) until each diffuser is visually similar. Adjust one line at a time, this may take a few tries.



SYSTEM STARTUP

Soft Start Procedure

In situations where the system is installed in a pond with significant thermal stratification, precautions must be taken at the start-up. To aerate a stratified pond, operate the system for 1 hour per day, during the day, for the first week. Then, gradually increase the daily aeration period to continuous aeration 24 hours a day. Sunny days are preferable to cloudy days because photosynthesis provides oxygen while the water circulates and mixes.

MAINTENANCE

Warning!

- Disconnect the compressor before handling and performing maintenance.
- Follow all boating safety rules and regulations, including wearing a personal flotation device while on a boat.
- The compressor is oil-free and **does not need lubrication**.

Air filter

Verify intake filter after the first 500 hours of operation. CanadianPond.ca Products Ltd. recommends checking the filter every month. Clean or replace as necessary. Failure to maintain clean air filter elements will lead to clogging which will cause excessive heat and premature failure of the compressor. To verify the air filter of your Hiblow compressor:

- Unscrew or unclip the top cover of the compressor. (Darker green) (Picture #9)
- Remove or clean filter.
- If there is any dust or dirt, clean it.
- Reinstall top cover of the compressor.

Replacement filter cartridges are available online; you can scan the following QR code to see product or visit this link:

<https://shop.canadianpond.ca/fr/collections/aeration/products/parts-for-hiblow-compressor>



Cleaning Piccolo diffuser

BioPurge and EcoPurge are the only products tested and approved to clean Piccolo diffuser. **Do not use** chlorine, javex, drano or any other chemical product to clean the tubing.

ANY OTHER METHOD OF CLEANING THE AIRLINES OR DIFFUSERS WILL VOID THE WARRANTY.

TROUBLESHOOTING

Here are some helpful troubleshooting tips. If a problem occurs, please double check the assembly and installation instructions. Please contact CanadianPond.ca Products Ltd. if problems persist after reviewing these instructions.

"Compressor is not working."

Check to make sure the power cord is connected. Check if the user supplied GFCI circuit is tripped and if it is, push the reset button.

"The compressor is running, but there are no bubbles coming out of any diffusers."

Check for any leaks in the line connections. Retighten any loose connections. The compressor air filter may need to be cleaned or replaced. Contact us, our certified service center can most likely help you in this situation.

"The compressor is running. There are bubbles coming out of some diffusers, but not all of them."

Multiple causes can have this result: 1- Retighten loose connections, 2- The valves at the manifold may need to be balanced correctly, 3- There may be a clog on a diffuser that needs to be removed and 4- The compressor may be faulty. In the event of a faulty compressor, please contact us.

"The compressor is still running but lower quantity of bubbles than usual appears at the surface."

The compressor may need a repair kit. Contact us, our service center is authorized by Hiblow to do repairs on your unit.

WARRANTY

Compressor: 1 year

Torpedo: 3 years

Piccolo: 1 year

Canadianpond.ca Products Ltd. warrants this Small Aeration System to be free from defects in material or workmanship under normal use, conditions and service. Canadianpond.ca Products Ltd.'s obligation under this warranty is limited to replacing or repairing free of charge any defective part within the warranty period. Customers shall pay shipping charges for returning the unit to Canadianpond.ca Products Ltd. THIS WARRANTY IS IN LIEU OF ANY OTHER WARRANTIES, EXPRESSED OR IMPLIED, AND ANY OTHER OBLIGATION OR LIABILITY WHATEVER ON THE PART OF CANADIANPOND.CA PRODUCTS LTD. AND IN NO EVENT SHALL CANADIANPOND.CA PRODUCTS LTD. BE LIABLE FOR ANY SPECIAL OR CONSEQUENTIAL DAMAGES.

Warranty is void if:

1. The system is not maintained properly according to the maintenance recommendations supplied in this owner's manual.
2. The system is damaged by unauthorized tampering.
3. The system is damaged by a natural event or power surcharge.

Warranty Claim Procedure

The best method for establishing the warranty period is by the original receipt. Once the warranty coverage has been established, please contact Canadianpond.ca Products Ltd. at 1-450-243-0976 or by email info@canadianpond.ca prior to shipping, to obtain a sales return order number.

Ship to:

Canadianpond.ca Products Ltd.
Att.: Repair department
570, ch. De Knowlton
Lac-Brome, QC
J0E 1V0

Canadianpond.ca Products Ltd. will cover the return shipping fees for repairs under warranty by ground service within Canada. If a faster shipping method is required by the customer, up charges may be applicable, and shipping service is not guaranteed.

Other Repairs

Most failed equipment can be repaired at substantially lower cost than a new replacement. Please contact us for more details and procedures to have the item repaired. A credit card number is required to confirm any service request.

Thank you for purchasing a Small Aeration System at CanadianPond.ca! We hope this product allows you to achieve the best results for the preservation of your water body! Proud of your installation? Send us pictures at info@canadianpond.ca for a chance to be featured on CanadianPond's social platforms, newsletter, and website.