



Eco Pond
— RESCUE —
www.ecopondrescue.com

L.I.P.V.A.C.S.

Pond Aeration Pump

Model Numbers

#SJ4864-½R & #SJ4864-1R

#SJ4864-½C & #SJ4864-1C

Assembly Instructions

Limited Warranty:

- 1 Year from date of purchase includes parts and labor for defects in products and workmanship.
- Will not include damage or failure from improper installation or abuse or lightning strikes.
- Customers are liable for costs of shipping defective part to EPR for warranty; EPR will replace or repair part and ship back to customer.

GENERAL DO'S & DONT'S WHEN INSTALLING A LIPVACS UNIT

Do
Mount the pump box as close as possible to pond/lake
Mount the pump box above the high water line of pond/lake.
Drive in 2 pieces of rebar or wood stakes to the discharge/pam cannon mounted and tie to hold in position.
Make sure that the white check valve is positioned with the arrow up.
Put the air bleeder screw back in the pipe.
Position filter/intake in the deeper section of pond, (as long as filter is in the bottom 25% of the pond this is good.
Temporary Extension Cord - Must be heavy duty – at least 12-3 with ground and no more than 100ft. long.
PAM Logs - tie on cap before feeding into Pam Cannon.
When ready to fire up - prime the pump using wrench provided remove primer cap and fill with water – replace cap snug. <i>[This procedure should only have to be done 1 time – but sometimes air gets trapped in the pipes so you may have to do it again]</i>
Don't
Don't glue anything until you have laid it out completely and are sure
Don't Use more than 2 pieces (20ft) of intake pipe (if possible)
Temporary Extension Cord – Don't use more than 100ft or a light cord as this will burn up.
Don't over tighten the Primer cap.
Don't add to the discharge piping, any more than is absolutely necessary as this causes back pressure reducing the volume of air delivered to the pond.

When your system is up and running, tie a short piece (8-10 inch's) of fishing line with a small lead weight to a fishing float and throw it in the pond, you should be pleasantly surprised with the movement of water !!! you will not be white water rafting,,, but.....

Parts For Assembly

2" Venturi

2" pump Intake

4" Filter assembly Part A

4" Filter assembly Part B

2" Check Valve

4" Filter Grate

2" straight coupling

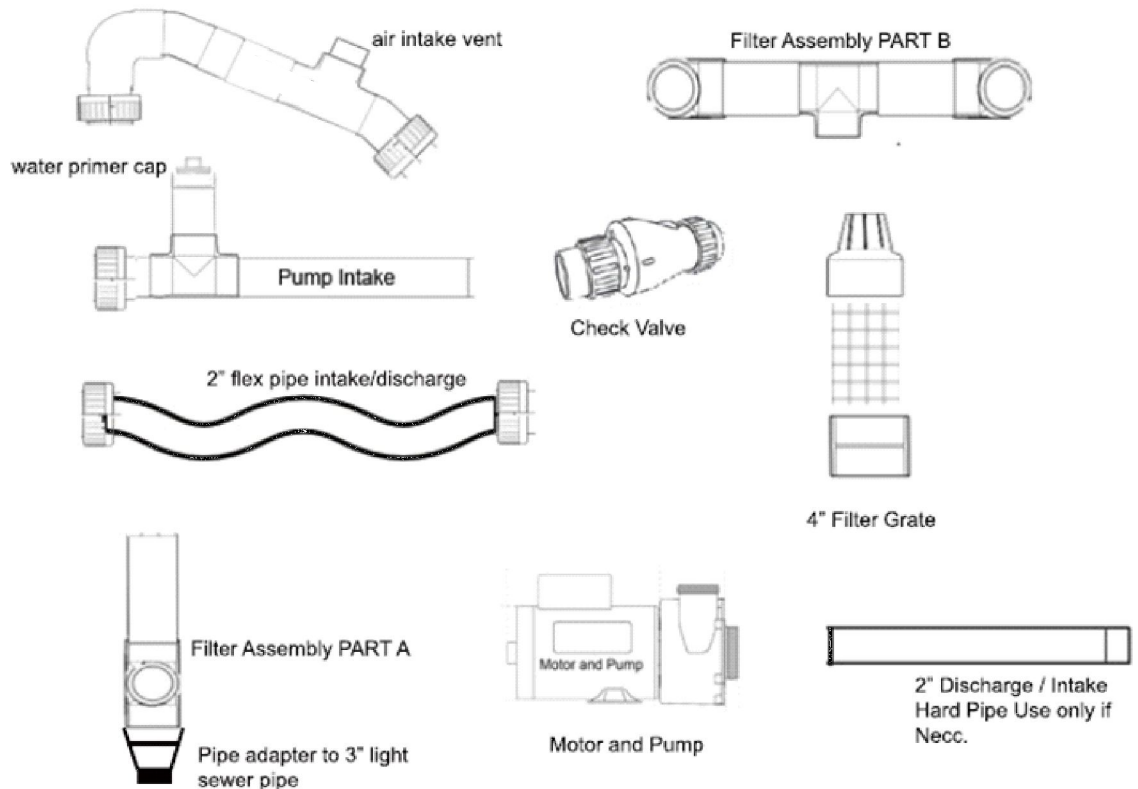
Motor and Pump

Mounting Base

2" x 10' PVC Pipe

PVC Glue

11" x 4" mesh filter



NOTE: Depending on your model, many of these pieces are already assembled

Things that you will need to buy to complete the installation of the typical unit.

2- 10ft pieces of 3 inch sewer pipe, there is a sample piece in box (unused).

1- Small can of PVC glue.

1 – Can of spray paint to camouflage visible piping if required. (flat black by rust-oleum seems to work best.)

Note: the glue and paint are not allowed to be shipped (inflammables).

The 10ft sections of pipe cost on average \$80.00 to ship or \$10.00 to buy at Lowes.

Tools you may/will need:

Hacksaw, Phillips screwdriver, large channel lock pliers – to tighten pipe fittings. 16 inch size.

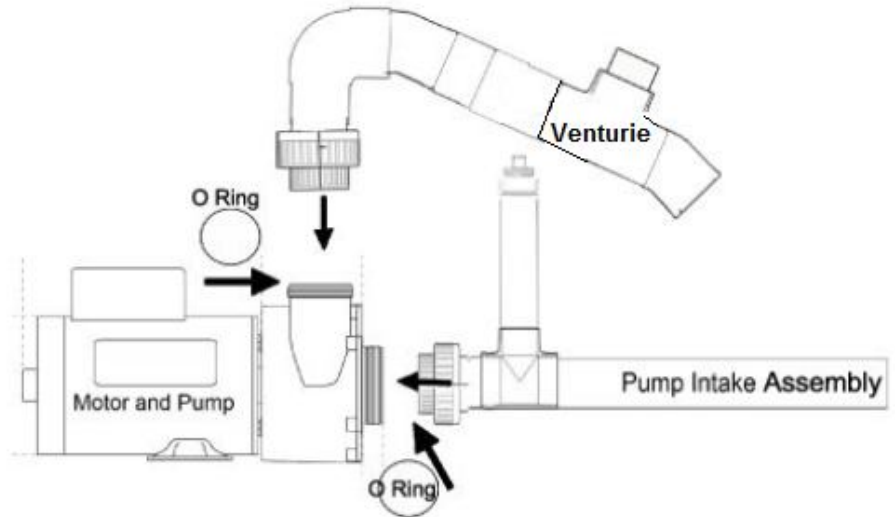
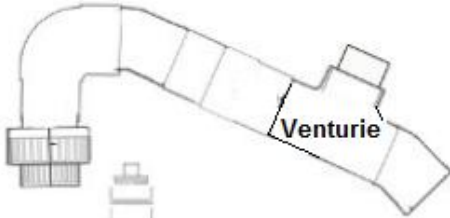
Bucket – to fill primer cap, Electric outlet regular house 110 v to plug into

Cold beverage of choice – obviously

Comfortable chair – to sit and enjoy your pond and watch the float circle your pond, round and round..... round and round

LIPVACS Pump Connections

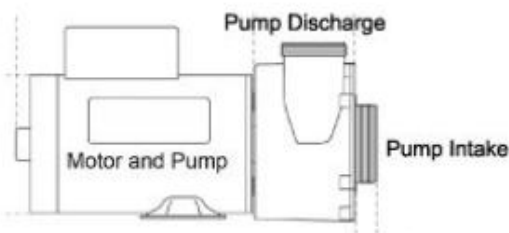
- LIPVACS Venturie
- Pump Intake Assembly
- Motor with Pump
- O - Rings



- Step 1 - Attach Venturie to Pump Discharge.
Step 2 - Attach Pump Intake Assembly to Pump Intake.

[Make sure O-Ring is in place and you do not cross thread or over tighten connections. They should be tight and without leaks.]

Note - Some O-Rings are already in place in pump connections. (Use only 1 O-Ring per connection)



Drawing is not actual motor. Just for illustration

Position the pump so the angles of the pump discharge and intake will clear the edge of the pad as they go into the water.



↑ decking or concrete pad built parallel to waters surface. It should be as close to the edge of the water as possible and high enough to stay dry.

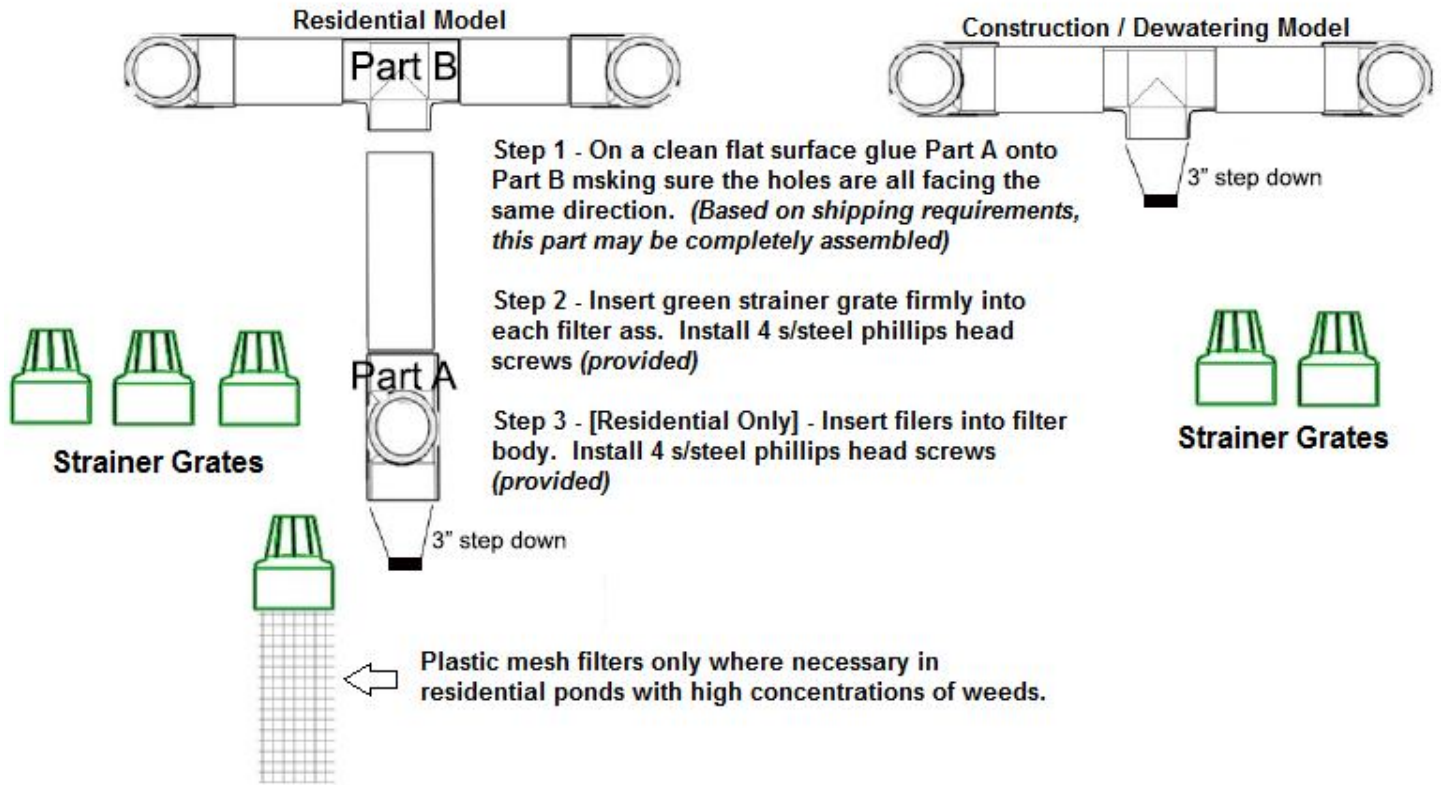
Water Surface

Bank or slope of pond

Parts List

- 1 - Filter Assembly Part A
- 1 - Filter Assembly Part B
- 3 - Filter Grates

Filter Intake Assembly



Extend Intake Pipe

Parts List

Filter Intake Assembly

3"x10' DWV pipe (You rarely need more than 2 pcs - sample of pipe in box)

[Pipe available at Lowes approx \$10.00 or costs approx. \$80.00 to Ship.]

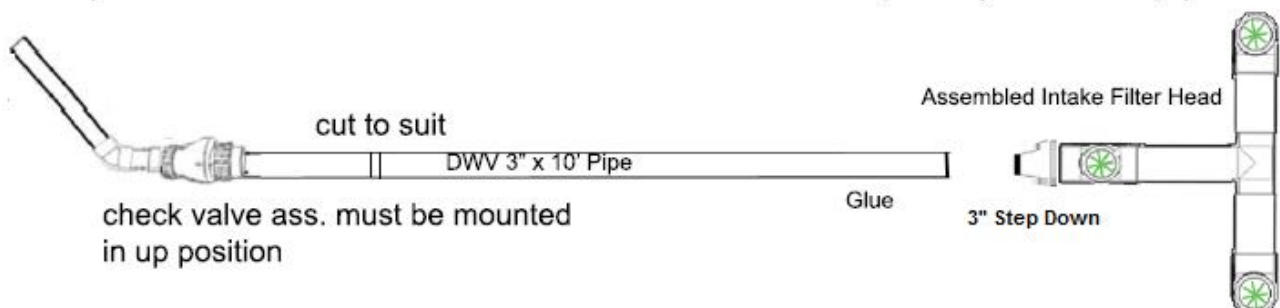
PVC Glue

Saw (to cut pipe)

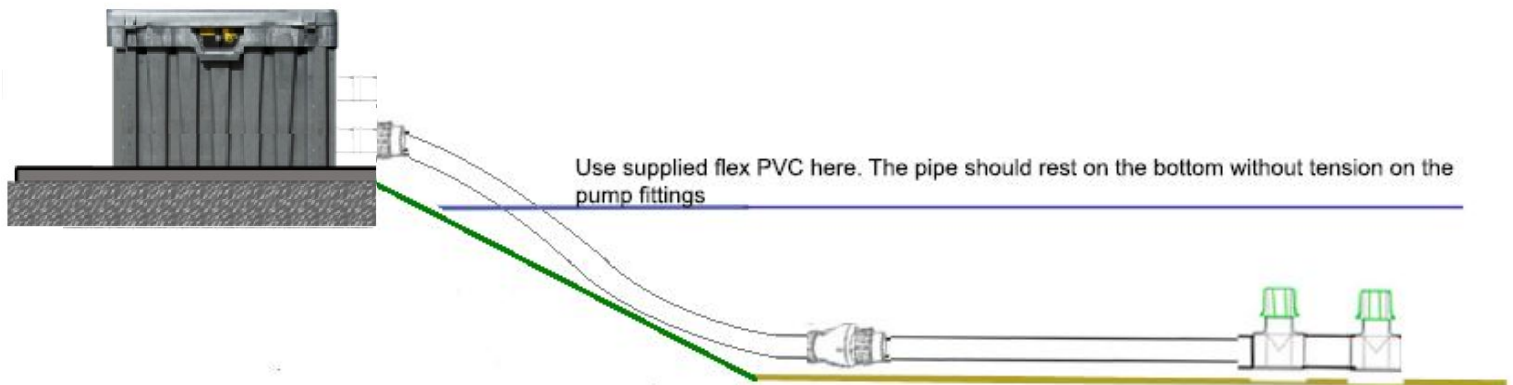
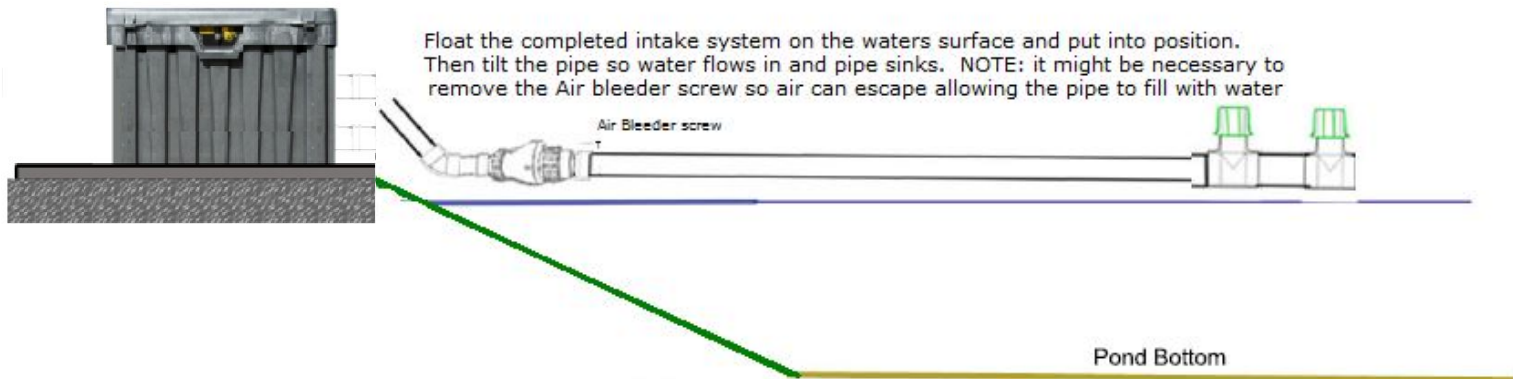
Step 1 - Determine the length of pipe you need to place the intake filter head in position in the water.

Step 2 - On a clean flat surface, glue the pipe together using PVC glue. Make sure the pipe is dry and clean.

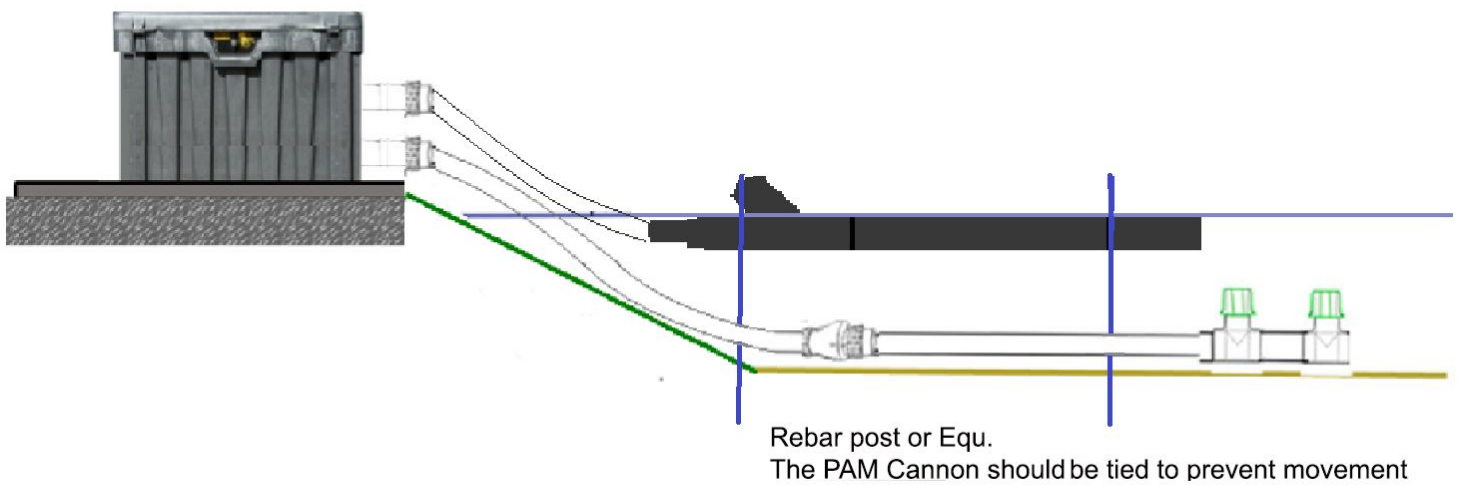
Step 3 - Glue the assembled intake with 3" sewer (DWV) to the 3" pipe fitting



Float, sink and position intake



Completed Example



L.I.P.V.A.C.S Water Flow Diagram

Water is taken off the bottom of the pond and drawn into the pump via the 4" intake pipe. The water on or near the bottom of ponds and lakes contains less dissolved oxygen and is cooler. Typically, sunlight does not reach these areas causing the water to degrade in quality, be less oxygenated and possibly thermally stratified.

The water is then pumped through the LIPVACS and air is mixed violently with the water, similar to shaking a can of soda, adding much needed oxygen. Water is discharged, past PAM if needed, horizontally back into the pond creating a horizontal and vertical flow.



Typical Pond installation

Northern Hemisphere set
circulation clockwise

