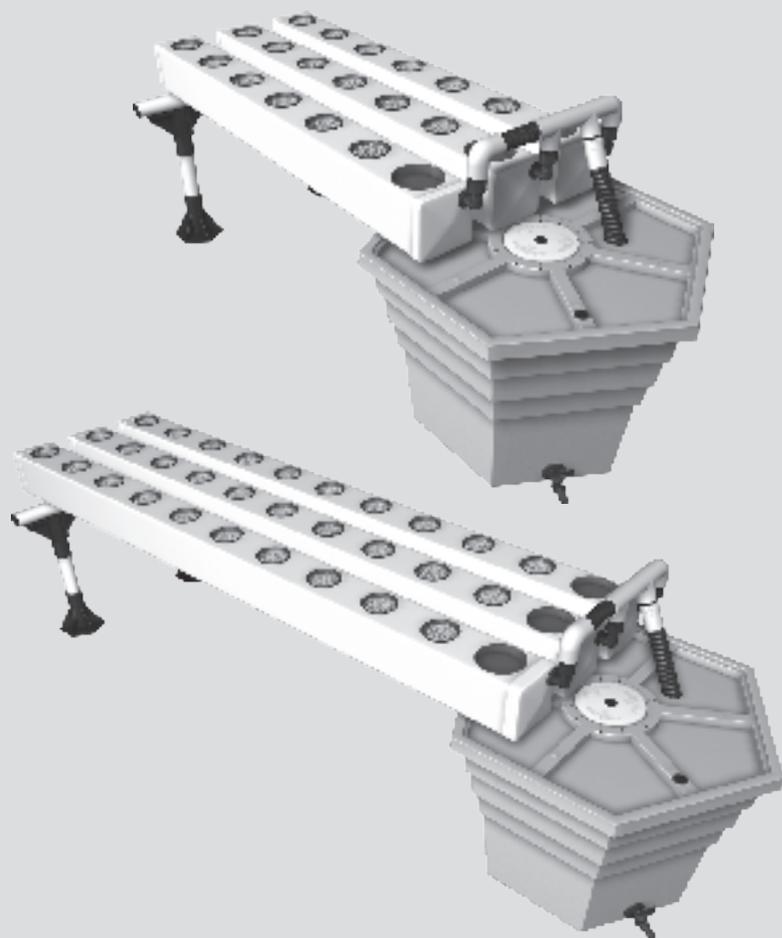


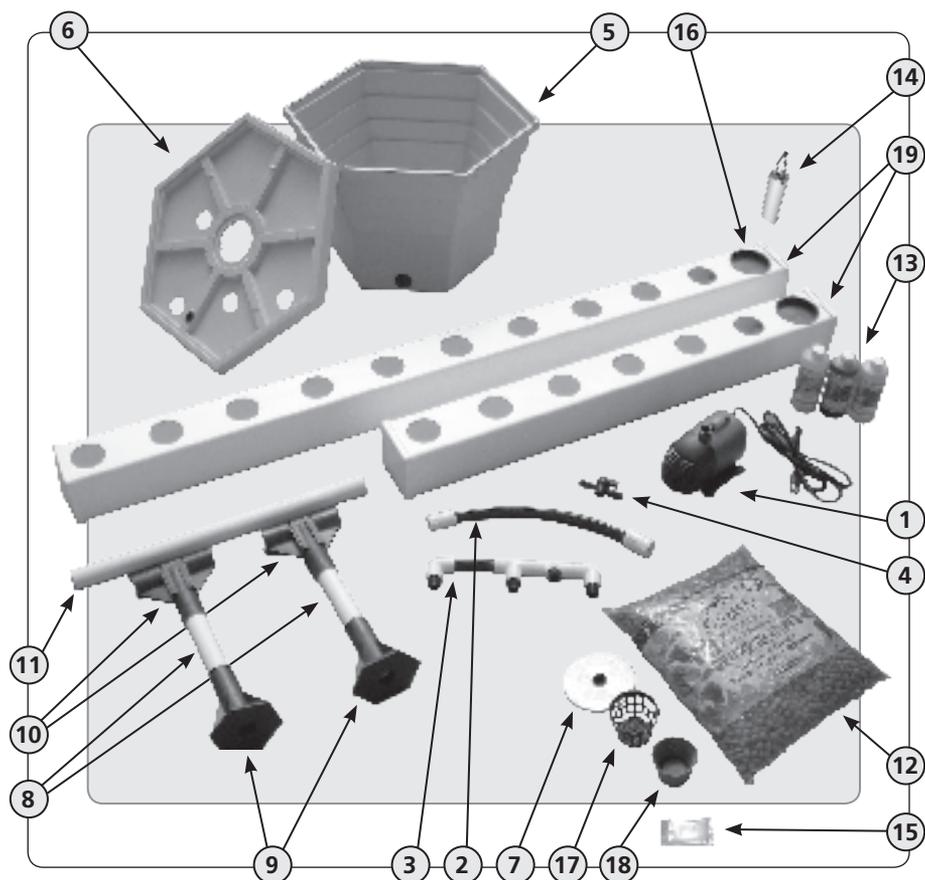
GENERAL HYDROPONICS®

# Aeroflo<sup>2</sup>®

18 & 30

## Assembly Guide





## AeroFlo<sup>2</sup> 18 & 30 PARTS:

### Parts Box:

- 1: WaterPower Pump 120
- 2: Pump line
- 3: Manifold
- 4: Drain Valve
- 5: Reservoir 17 gallon
- 6: Reservoir Lid
- 7: Hatch Cover
- 8: SnapStand Support Legs, 2ea
- 9: SnapStand Base, 2ea
- 10: SnapStand Cross Fitting, 2 ea
- 11: SnapStand Cross Support
- 12: Clay Pebbles 9 L
- 13: FloraSeries Nutrients

### Chambers Box:

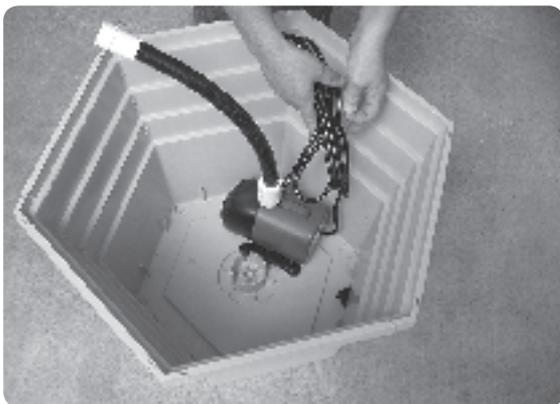
- 14: Drain Level Tube (DLT)
- 15: DLT Lubricant
- 16: DLT 4" Covers
- 17: Net Pots 3" (18 or 30)
- 18: CocoTek Liners 3" (18 or 30)
- 19: Growing Chambers (4' or 6')

**STEP 1**

Insert the **Drain Valve** into the **Reservoir** grommet while supporting the grommet from the inside.

**STEP 2**

Connect the **Pumpline** to the **Pump** leaving the **Swivel Fitting** to attach to the **Manifold**.

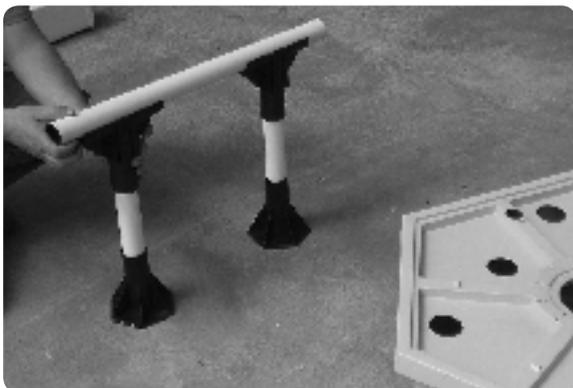
**STEP 3**

Place the **Pump** assembly into the **Reservoir** so the **Pumpline** emerges through the **Reservoir Lid**.



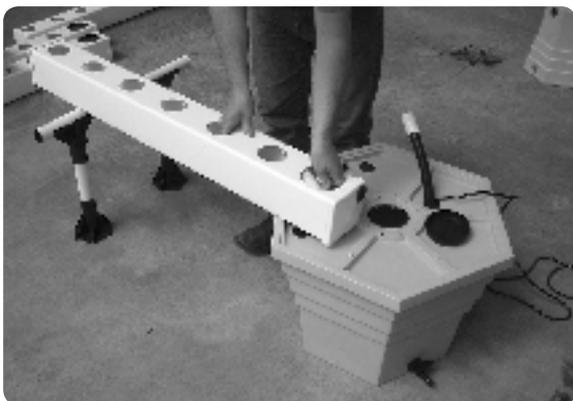
#### STEP 4

Slide the two **Support Legs** into the **SnapStand Bases** and the **Snapstand Cross Fittings**. Snap the **Cross Support** into the **SnapStand Cross Fittings**.



#### STEP 5

Remove the **Sprayline**, **DLT**, **Net Pots** and **CocoTek Liners** from each of the **Growing Chambers** and place the **Growing Chambers** on the **Support Stand** and **Reservoir**.



#### STEP 6

Lubricate the end of the **DLT** with the **Lubricant** provided and insert into the **Growing Chamber** drain hole and align with the holes in the **Reservoir Lid** for each **Growing Chamber**. Adjust water level in **Growing Chamber** by raising or lowering the **DLT**.



**STEP 7**

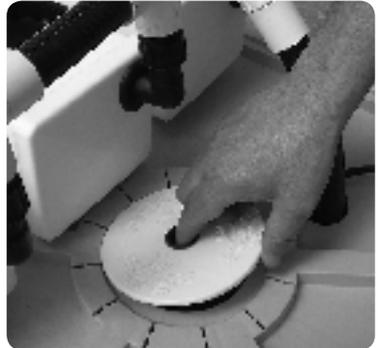
Setup the rest of the **Growing Chambers** and install the **Spraylines** by following the directions provided with the **Spraylines**.

**STEP 8**

The level of the water in the **Growing Chamber** is controlled by the height of the **DLT**. Keep the **DLT** access covered with the **DLT Cover**.

**STEP 9**

Attach each of the **Spraylines** to the **Manifold** and then the **Flexible Pumpline** to the **Manifold**. Make sure there is a rubber gasket in the **Sprayline** fitting and **DO NOT OVER TIGHTEN**. Cover the inspection hole with the **Hatch Cover**



**STEP 10**

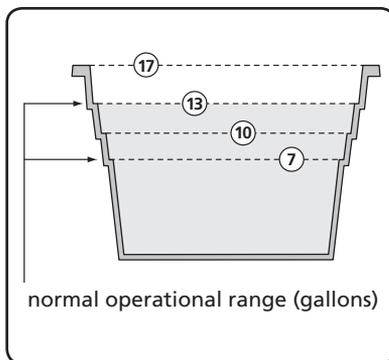
Place the **Net Pots** with the **CocoTek Liners** into the growing sites and use the **Clay Pebbles** to support seedling plants. Always rinse the **Clay Pebbles** before use and see the Helpful Guidelines for planting and cleaning the system.



**GH** HELPFUL GUIDELINES

**FILLING**

Before filling your system with water it is essential that you understand the system capacity. The reservoir should be drained first before draining the growing chambers. This will prevent overfilling of the reservoir and possible flooding. See illustration for reservoir capacities at each of the steps. Fill the reservoir with a known volume of water and then start the pump. Adjust the Drain Level Tubes (DLT) to the desired level and start adding water in 1 gallon increments until the Growing Chambers and reservoir are at the desired levels. Record the total gallons to be used for calculating the amount of nutrient to add to the system. See chart for approximate amount of water each system holds at the two operating levels.



**CAUTION:** Never run the water pump without water covering the pump inlet.

AeroFlo <sup>2</sup> system	Reservoir capacity	Each Chamber		Total Water*	
		low level	high level	low level	high level
gallons					
AeroFlo <sup>2</sup> 18	13	0.6	2.4	15	20
AeroFlo <sup>2</sup> 30	13	1.0	4.0	16	25

\* Total amount of water in all chambers and reservoir

## PLANTING

To prepare a seedling or a plant for transplanting, remove all soil and/or organic material from around the roots. Plants must be sturdy with established roots before transplanting. Choose seedlings because it's more difficult to successfully transplant older plants. If your plant has been growing in soil or peat moss, gently remove the plant from its pot and carefully rinse as much soil as possible from the roots before transplanting. Although this method of transplanting from soil to hydroponics is somewhat risky, (soil may contain diseased organisms that proliferate in the rich hydroponic solution), we have been very successful in implementing, particularly with culinary herbs and encourage you to try it. You can avoid these problems by starting plants from cuttings in one of our RainForest™ Systems or RapidRooters™.

## PLACEMENT

Abundant light, proper temperature and adequate ventilation are crucial for fast growth, healthy plants and higher yields. Place the AeroFlo<sup>2</sup> system in a warm, well-lit, well-ventilated location, such as an outdoor garden, sunlit window, patio or greenhouse. Keep your AeroFlo<sup>2</sup> away from areas where the inevitable dripping that occurs during filling, draining and pH adjustment could cause water damage.

## NUTRIENTS

Start by choosing either the most widely recognized, reliable nutrient in the industry, Flora Series® or step into the technological breakthrough of FloraNova® for the accelerated performance of mineral nutrients enriched with the healthy, flavorful characteristics of organics. Please refer to our Feeding Schedule that is provided with the system for nutrient recommendations.

- Keep the nutrient solution temperature below 75° F (24° C).
- Change nutrient solution every 7-10 days.
- Top off with fresh water between nutrient changes.
- Keep nutrient solution aerated for best results.
- If your water is above 200 ppm total or 70 ppm calcium, use Hardwater FloraMicro instead of FloraMicro.

The pH (acidity or alkalinity) of a nutrient solution affects the availability of the elements contained within. Use GH pH adjusters to maintain nutrient pH between 5.5 - 6.5.



## OPERATION

When plants are small and their roots are not well developed, the Drain Level Tubes (DLT) should be at the maximum height to allow nutrient rich water to reach the bottoms of the net cups. Once the roots have grown and are immersed within the flowing stream of nutrient, the DLT's can be pushed down to increase oxygen within the nutrient and growing chamber. The water level in the Growing Chambers should be maintained at a 1" to 2" depth in case the power or the pump fails. Generally it's best for the system to always run. However, many people do put their AeroFlo2 systems on a timer to save electricity. The AeroFlo2 stays on during the light cycle and only runs for 10 to 15 minutes every 1 to 2 hours for the night cycle. Cycling the pump keeps the water from stagnating and the roots from drying out and dying.



## PREPARATION FOR REPLANTING

Drain the whole system, brush out the growing chambers and, if necessary, unplug the spray holes in the beige spray lines mounted inside the growing chambers. Sponge off all parts to disinfect. You can use General Hydroponic's FloraShield™ to clean the system and clay pebbles or a disinfectant. Rinse everything thoroughly. Refill it with water and run it for a few hours, then drain again before introducing a new crop. Clean filters frequently. Simply unplug pump and remove reusable filter. Rinse pump filter under hot water to clean. **CAUTION: Do not rinse filter with a strong Bleach (chlorine) solution, it may react with the filter and form an oily residue.**



## TROUBLE SHOOTING

### *If white salt deposits form on the Clay Pebbles:*

1. Try using a milder nutrient solution and topping off with plain water only.
2. Occasionally drain your system, refill with plain water and run the pump overnight. After the overnight rinse, empty reservoir and refill with fresh nutrient.

### *If Plants are not growing well and you suspect "hard" water:*

1. Use FloraMicro Hardwater in place of FloraMicro.
2. Try distilled or purified water. You should see a significant improvement in plant health and growth within one week.
3. Collect rainwater for use in your AeroFlo<sup>2</sup>.

### *If nutrient solution stops flowing from the beige spray lines:*

1. Check to ensure that pump is plugged in and the reservoir is filled with nutrient solution.
2. Check whether emitter holes in the beige spraylines are clogged. Keep pump filter clean and use General Hydroponic's FloraKleen™ to minimize nutrient buildup and crusting.

## FLORAKLEEN®

- Dissolves accumulated fertilizer salts.
- Reduces plant stress from excess and imbalanced nutrients.
- Releases nutrient bonds between plants and systems, also correcting nutrient lock-out.
- Use FloraKleen as a final flush a few days before harvest to promote maturation and sugaring.
- Safe for all systems and media while plants are growing.

FloraKleen removes fertilizer residue that can accumulate over time in hydroponic systems, growing media, and potting soils. Use FloraKleen monthly to purge your hydroponic system or potted plants of excess salts that can accumulate as a result of regular fertilizer application. FloraKleen can be used at anytime throughout the plant's life and is an excellent final flush to help improve flavor. Its high concentration and low price make FloraKleen the economical choice for maintaining your plants in both hydroponic and soil based environments.



## FLORASHIELD®

Maintain healthy roots without resorting to harsh toxic chemicals. FloraShield's unique combination of compounds can thoroughly rinse systems and plants during all phases of growth. Growers across the globe have attested to FloraShield's ability to solve root problems.

*Not to be used with SubCulture*



## FLORABLEND®

- Organic nutrient supplement
- Increases and builds healthy root systems
- Increases plant immunity and metabolic rates
- Builds strong plant structure and healthy foliage

FloraBlend is a Vegan Ferment that is made from a proprietary blend of plant materials, seaweed, rock powders and micronized leonardite.

FloraBlend is produced with a diverse mixture of highly bioactive microorganisms that are fed a feast of select food sources in a hyper-oxygenated environment. These beneficial microorganisms multiply rapidly, consuming these food sources and through bioconversion processes new organic compounds are formed. These organic compounds are enzymes, metabolites and organic acids, which energize plant metabolic processes.

These highly soluble organic compounds increase and promote healthy root structures, build plant immune systems and provide carbon building blocks for plant processes responsible for color and flavor of fruits and vegetables.



## FLORALICIOUS PLUS®

Floralicious Plus is a vegan bio-stimulator and nutrient supplement that includes all the benefits of Floralicious but has been formulated to be applied at all stages of plant growth. It is five times more concentrated than Floralicious, so its application rates are much less. It also contains dormant beneficial microbes that activate when introduced to a plant's root structure. This metabolic fuel solution is packed with powerful vitamins, complex plant sugars, protein-building amino acids, seaweed extracts, carbon building blocks and aromatic oils, all in a fulvic acid base.

Floralicious Plus adds quality, flavor and color to all plants, and can be used in all hydroponic applications and soil or soil-less growing environments.



## LIQUID KOOLBLOOM®

Liquid KoolBloom is a flowering nutrient supplement that goes way beyond other bloom boosters. Enriched with stress reducing vitamins and nutrient transporting acids, Liquid KoolBloom provides the essential nutrients needed by plants to initiate explosive flowering and build bigger blooms. Liquid KoolBloom promotes heavy production of essential oils and increases fruit and flower development without damaging delicate root systems often associated with early yellowing of larger foliage.

Start using Liquid KoolBloom during the transitional period between vegetative and regenerative growth to take advantage of its unique characteristics and bloom builders.



## DRY KOOLBLOOM®

KoolBloom is a highly concentrated nutrient supplement that promotes abundant flowering and helps facilitate ripening in annual flowers and herbs. KoolBloom is rich in important nutrients and contains precise amounts of ripening elements. KoolBloom is to be used only at the very end of a plant's life cycle and will help build larger, heavier fruits and flowers.



## FLORANECTAR®

- Organic nutrient supplement
- Influences sweetness and aromas in fruits and flowers
- Helps ensure optimal plant metabolic rates
- Adds additional energy for plants and beneficial microorganisms

Our scientists have formulated FloraNectar to optimize the greatest transference of sweetness and aroma into your fruits and flowers.

FloraNectar contains all natural raw cane sugar, molasses, malt syrup, select plant based esters, L-amino acids, organic acids, vitamins and essential minerals.

This unique blend of ingredients helps your plants regulate enzymes that trigger specific reactions involved in maintaining optimal metabolism. This allows plants to achieve a balance between respiration and photosynthesis in high intensity growing environments where the rate of respiration can sometimes exceed the rate of photosynthesis.

As a result, FloraNectar ensures optimal metabolic rates during flowering and fruiting phase when nitrogen levels have been reduced.

FloraNectar also promotes a sturdier plant structure during the vegetative phase when high levels of nitrogen are present. FloraNectar fulfills the additional energy requirements of your plants throughout all phases of growth and during stressful times of transition.



## pH UP & DOWN

To maximize plant growth, the pH content of your nutrients should be slightly acidic. Experienced growers consider the ideal pH for most crops to fall between 5.5 and 6.5. Users of General Hydroponics nutrient products generally do not experience problems maintaining the proper pH range because our formulas are pH buffered.

### pH UP

Base formulated using Potassium Hydroxide and Potassium Carbonate. Add a little at a time if your nutrient pH is too low in order to raise the pH to the proper level.

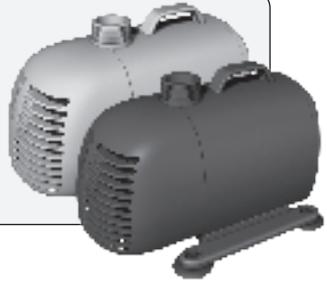
### pH DOWN

Acid formulated using food grade Phosphoric acid. Just add a little at a time if your nutrient pH is too high in order to lower the pH to the proper level.



## waterPOWER® 85 & 120

The WaterPOWER magnetic drive pumps offered exclusively by General Hydroponics can be used in line or completely submersible. Used in our popular AeroFlo 18, 30 and 36 units, the WaterPOWER pumps come with 1" fittings and an extra sponge filter and impeller.



## RAPIDROOTER®

Rapid Rooter's breakthrough technology produces a unique matrix of composted organic materials bonded together with plant-derived polymers. Rapid Rooter plugs are manufactured using a scientifically controlled process that yields large populations of beneficial microbes in the media. These naturally-occurring microbes colonize young roots, helping plants resist disease while maximizing nutrient uptake. Rapid Rooter plugs are fortified with General Hydroponic micronutrients for abundant root growth. The optimal air-to-water ratio within the plug matrix results in early root growth. Use Rapid Rooter for robust early rooting that supports explosive plant growth.

*Rapid Rooter plugs are available in the following sizes:*

- 50 plug tray
- 50 plug bag
- 98 cell mat



## RAINFOREST®

The Rainforest is the perfect system for propagation or growing plants to full maturity. Our patented Vortex Sprayer provides a super-oxygenated mist for rapidly developing plants. With a compact design and small footprint, the Rainforest is available with 2", 3", and 6", site lid inserts to suit specific growing needs.



**GH**  
genhydro.com

PO Box 1576, Sebastopol, CA 95473, USA

707-824-9376 Monday through Friday 9am to 4pm PST

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