



# 2012 NFT System Package

Congratulations! You have just purchased a 2012 NFT System Package from American Hydroponics. This system includes a 2012 NFT system, 3Tray Propagation system and a NutriDose 1 mk2 controller. Our 2012 NFT System Package is a small example of what the big commercial growers use for lettuce, herb and basil production. It comes with everything you need to get started.

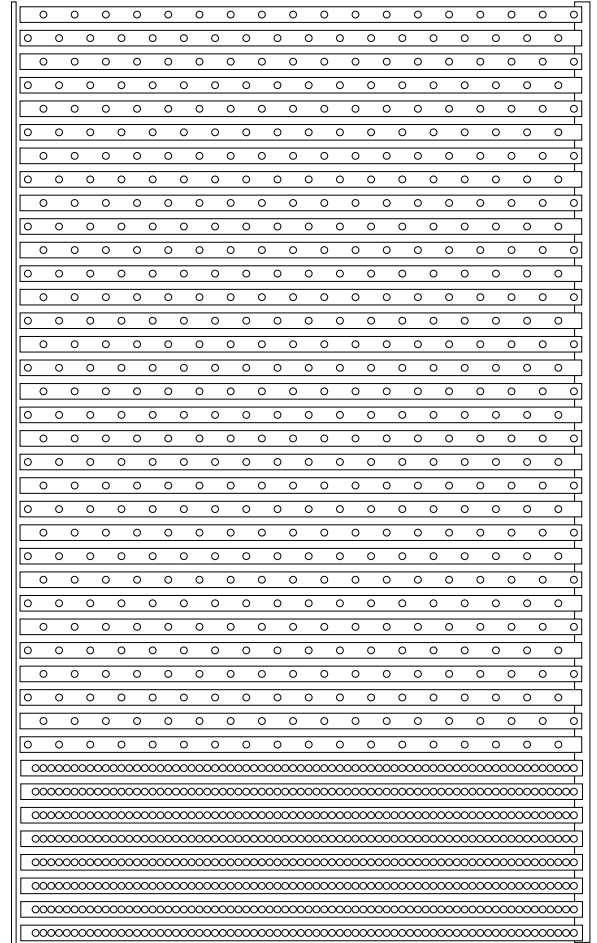
*2 year warranty on system (20 years on channel), 180 days on pump*

## Tools and supplies required for assembly:

Power drill with 5/8" hex bit, rubber mallet, tape measure and Sharpie.

## System Components *(see pick list)*

- [1] 20'x12' NFT system
- [1] 3Tray Propagation System
- [1] NutriDose 1 mk2 Controller
- [1] 2012 NFT System Instructions
- [1] NutriDose 1 mk2 Instructions
- [1] 3Tray Propagation System Instructions
- [1] Crop Turn Technology™ (CTT) Instructions





**93002 2012 NFT System package pick list**

How many  
1

Outline	Part #	Description	Count/ea	Total
<1>	91100	2012 NFT System	1	1
<2>	94046	3Tray Propagation System	1	1
<3>	95021	NutriDose 1 system MK2	1	1

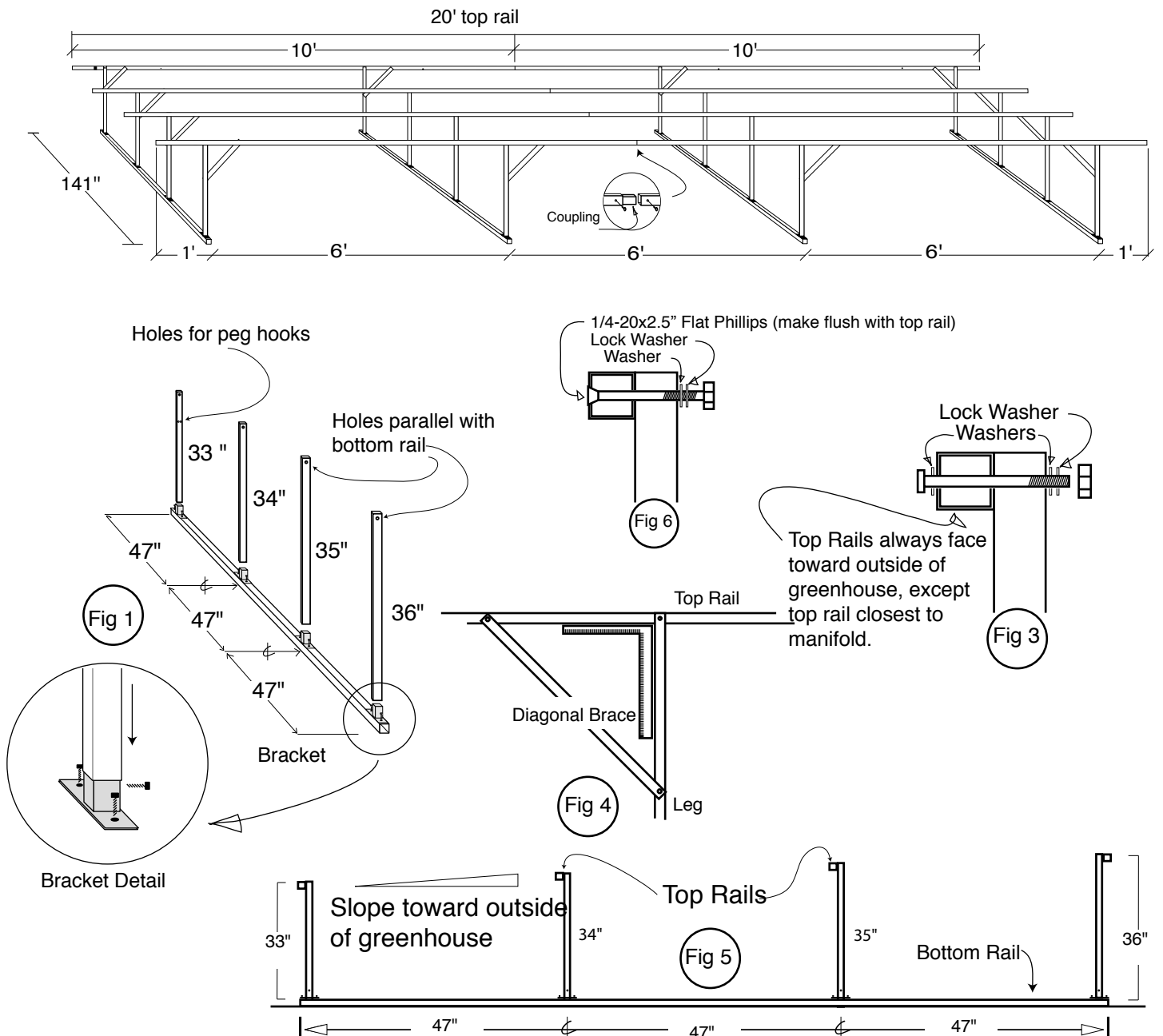
<1>	91100	2012 NFT System	1	1
	87029	5 Gallon Bucket	2	2
	87030	5 Gallon Bucket Lids	2	2
	88114	Basil Nutrient	6	6
	02008	Finishing gully High hole	16	16
	02009	Finishing Gully Low Hole	16	16
	02010	Nursery Gully	8	8
	91041	2012 Table frame	1	1
	91101	2012 Collector	1	1
	25095	2012 Plumbing	1	1
	83022	150 gallon reservoir	1	1
	83139	Rio 32HF Pump	1	1
	84015	1 Gallon Acid Tank	1	1
	83017	pH meter	1	1
	83015	CF Meter	1	1
	87200	Basil Bags	350	350
	87018	Oasis Cubes (2 cases)	2	2
	88030	pH Down 10% gallons	4	4
	88030	Float Valve	1	1
	87012	Float Valve Plumb kit	1	1

<2>	94046	3Tray Propagation System	1	1
	03032	Commercial MPT trays	3	3
	03035	30 gallon reservoir	1	1
	27012	Float Valve	1	1
	27028	Float Valve Plumb Kit	1	1
	28015	3Tray Table frame	1	1
	83127	Timer	1	1
	96021	3Tray Manifold	1	1
	91099	3Tray Collector	1	1
	30255	3Tray Sub Box	1	1

<3>	95021	NutriDose 1 system MK2	1	1
	95002	NutriDose Controller	1	1
	95017	Triple Peristaltic Pump Package	1	1

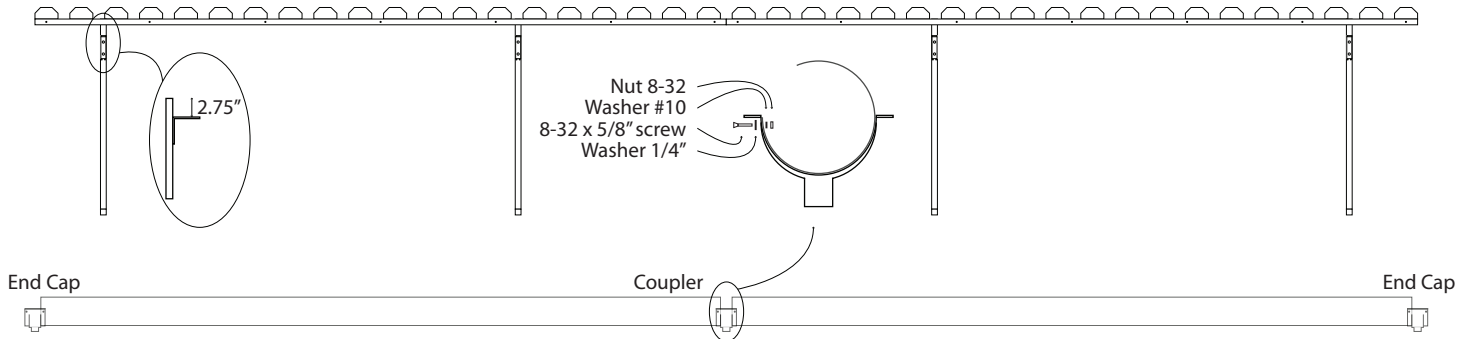
## 20' NFT Bench Frame layout instructions:

- Lay out bottom rails first (Fig 1)
- Mark and install leg brackets to bottom rails with screws.
- Lay out all the leg sets as per (Fig 1) - high to low, orient them so the bolt holes for the top rails are parallel with bottom rail, then insert over brackets and screw leg to bracket as per bracket detail.
- Hold both rail/leg assemblies upright (get another hand) and bolt (hand tight) the first top rail at the high end.
- Using a framing square, square up the top rail to the legs and attach the diagonal brace with screws (Fig 4). Top rails that collector attaches to has pre-drilled holes.
- Tighten the pair of bolts on the first top rail.
- Proceed to attach remaining top rails as per diagram.
- Top rail closest to collector, use the Flat Phillips machine screws (Fig 6).
- Adjust position of frame to collector and supply lines.
- Confirm that all tables are level side-to-side.

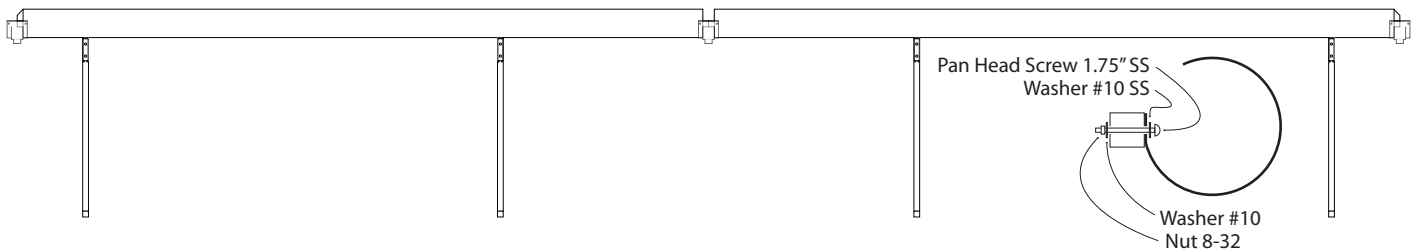


## Attach Manifolds and Covered Collectors:

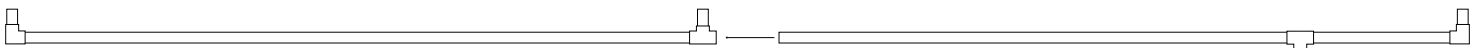
Attach (1) 4"x4" brace 2.75" from top of each 33" leg. Bottom of brace should be just above the two 3/16" peg hook holes. Attach end caps and coupler to both 10' sections of collector using stainless steel (SS) hardware provided: (8) Flat head screws 8-32 x 5/8" SS, (8) washers #10 SS, (8) washers 1/4" SS and (8) nuts 8-32 SS.



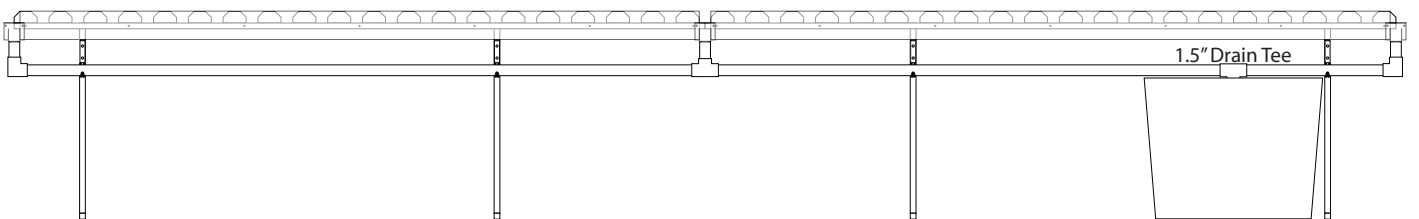
After braces are attached and collector is together, attach to table frame using hardware provided: (14) Pan head screws 8-32 x 1.75" SS, (14) washer #10 SS, (14) washers #10 and (14) nuts 8-32.



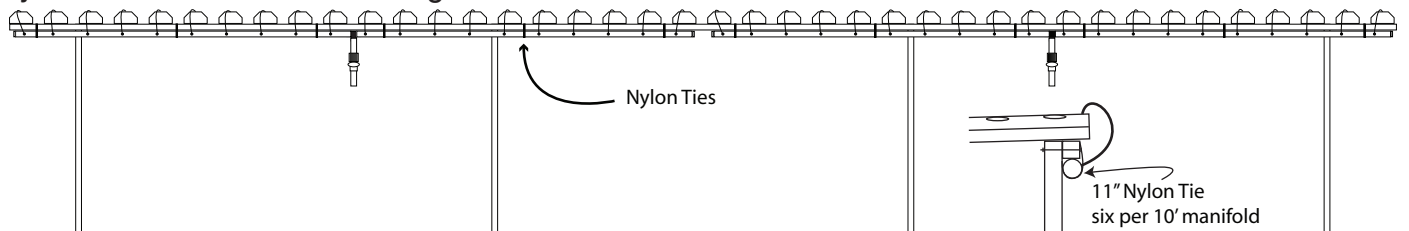
After Covered Collector is attached to table frame, insert (4) 3" peg hooks into the holes just below the 4" brace on each leg. Glue the two pieces of return plumbing together.



Rest return plumbing on peg hooks so that the 1.5" drain tee is over reservoir. Angle return plumbing to allow drains to fit inside return plumbing. Front of system should look like illustration below.



Insert ball valve/union piece to manifolds. Insert grommets into manifold holes (20 per manifold) and attach manifolds with nylon ties provided (manifold goes UNDER top rail). Each manifold gets (6) nylon ties and is attached to high end of table as shown.

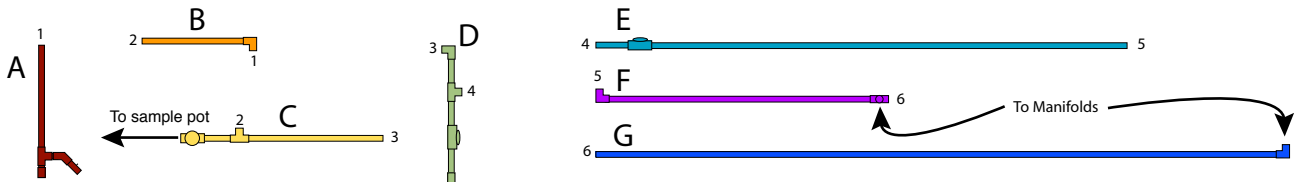
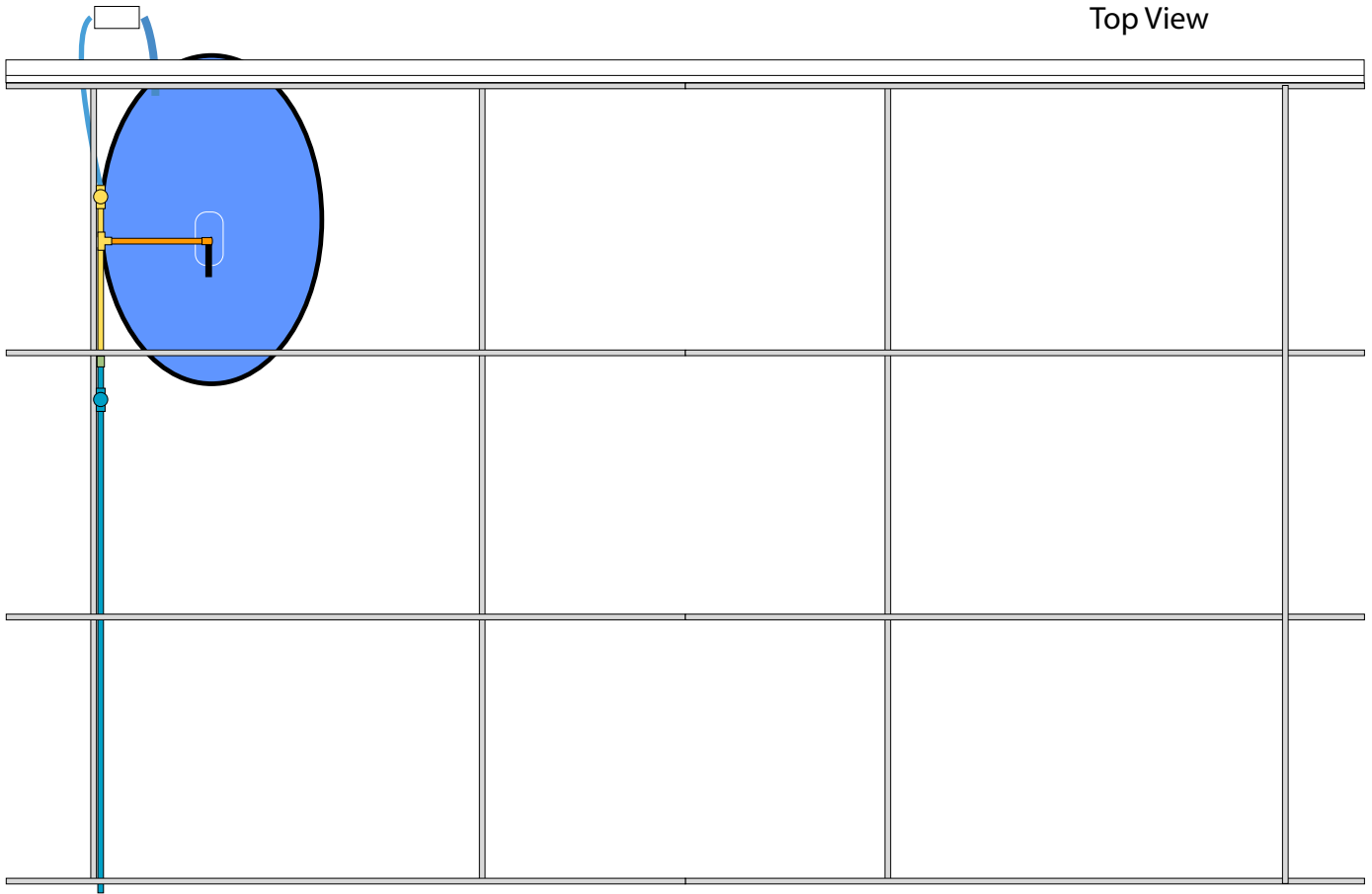


### Assemble manifold supply plumbing:

Follow the illustrations below to glue (7) pieces of supply plumbing to (2) manifolds. Dry fit all connections together before gluing. Use the 1/2" and 3/4" blue tubing to plumb your sample pot. 1/2" tubing from plumbing part C to sample pot, 3/4" tubing from sample pot back to tank.

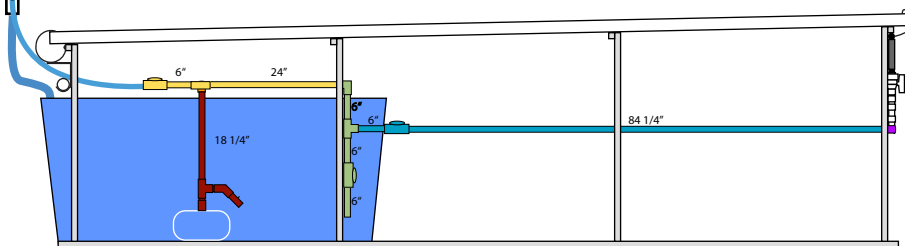
(See NutriDose 1 mk2 Instructions for more illustrations.)

Top View

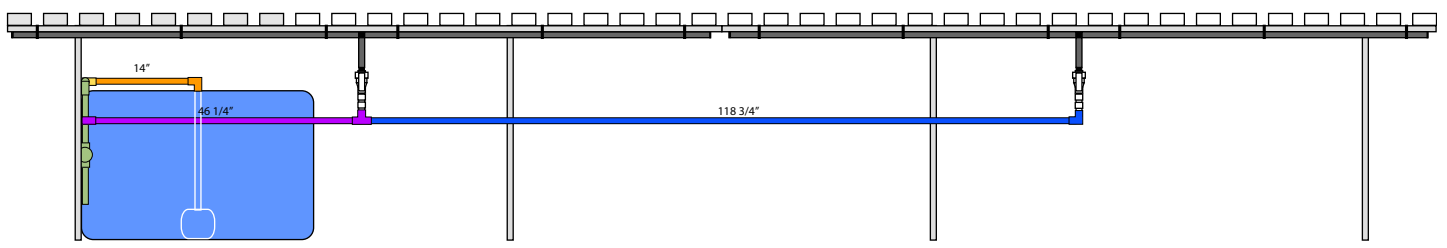


Sample Pot

Collector Side View

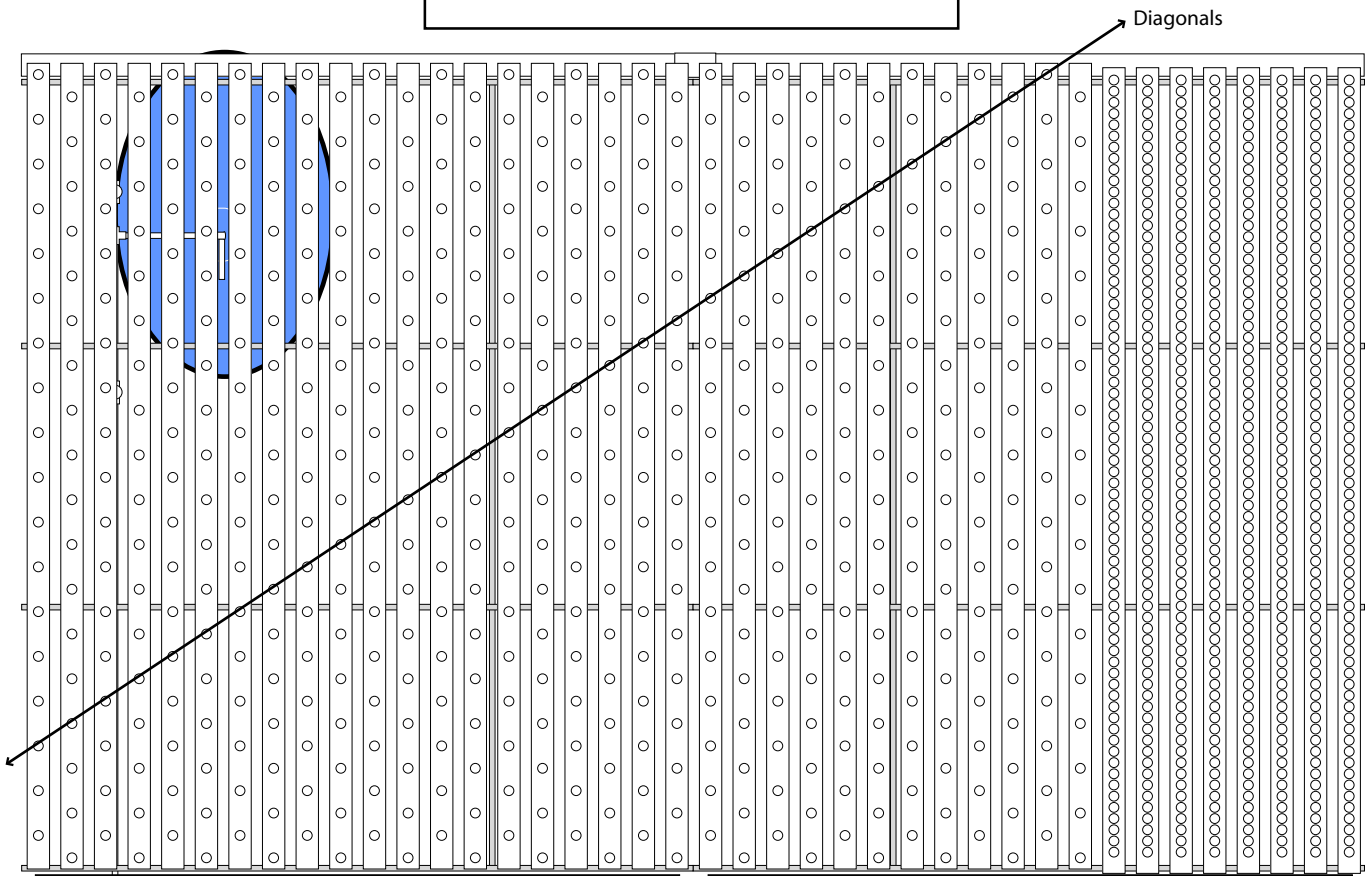
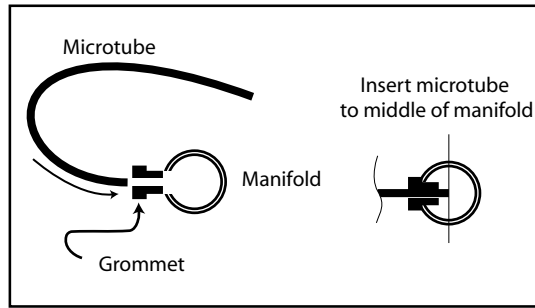


Manifold End View

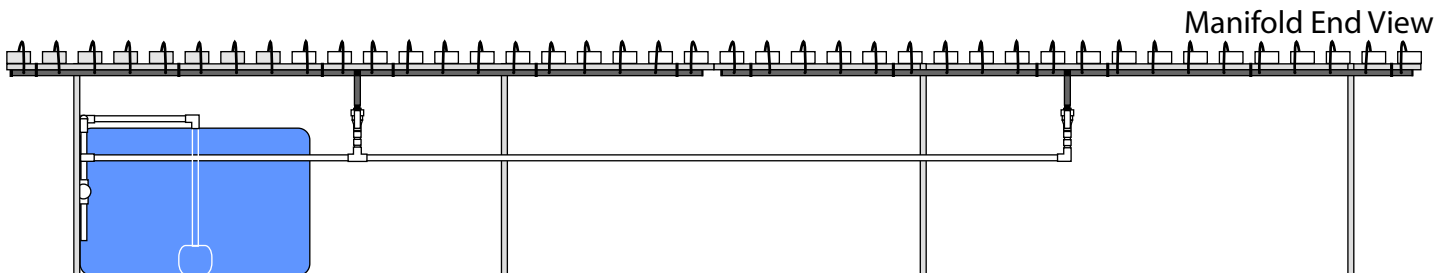


### Channel Layout and microtubes:

Lay Channel so they are staggered and diagonals are created. Down-lip goes to the collector end and up-lip goes to the manifold end. Insert all 40 microtubes into grommets (if you haven't done so already).

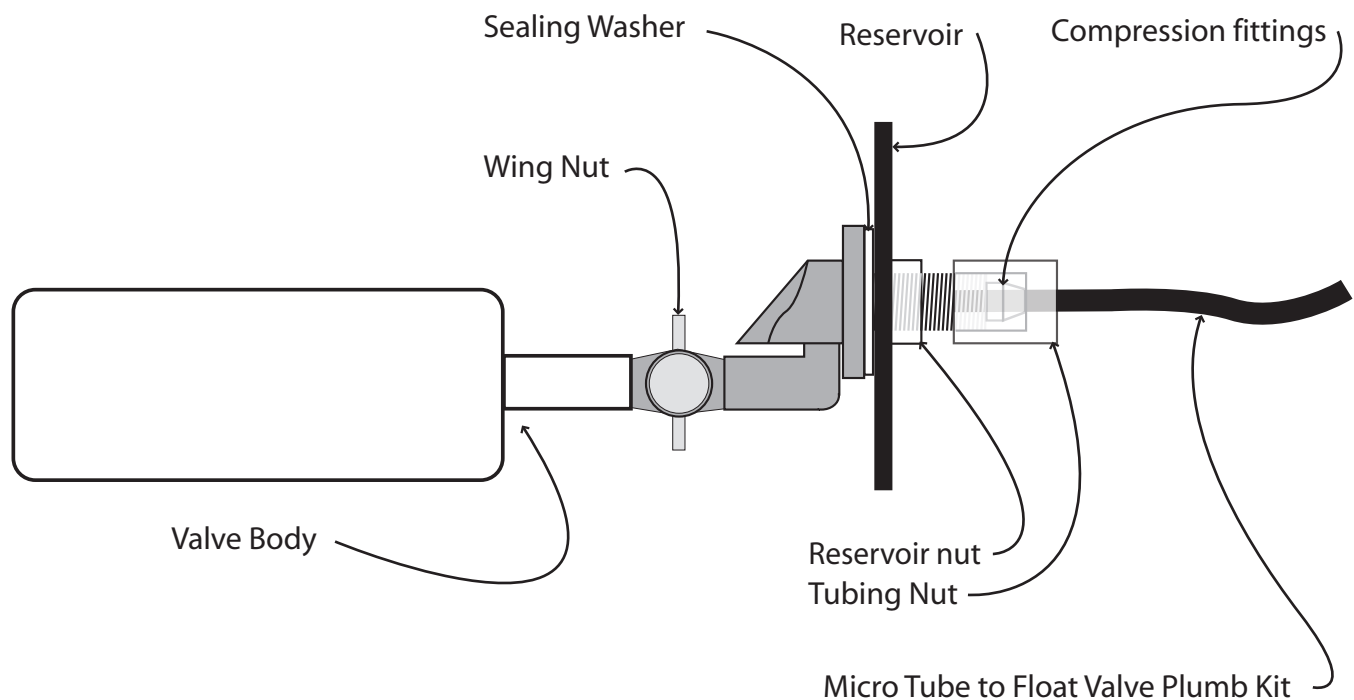


Top View



Manifold End View

# Float Kit Installation Instructions



## Float Valve Installation:

1. Remove reservoir and tubing nut. Insert valve body through the existing valve hole. Make sure sealing washer is on the inside of the reservoir. Secure with reservoir nut.
2. Loosely screw on tubing nut with compression fittings. Stick the 1/4" tubing coming from your Float Valve Plumb Kit into the tubing nut about 3/4 of an inch. Fasten tubing until tight.
3. Adjust wing nut if needed
4. Turn on needle valve attached to your Float Valve Plumb Kit and you are ready to grow.

## **Thank You For Choosing American Hydroponics**

Have a Question? Problem? Suggestion? Please let us know!

We constantly refine and enhance our products to reflect what our customers need and want. How do we know what to do? You tell us! Our most important source of ideas and suggestions is you – the people who use our products.

If you have questions, ideas, suggestions, or yes, problems, we want to know about it. Call us at (800-458-6543), fax us (707-822-4718), or send us an e-mail at [info@amhydro.com](mailto:info@amhydro.com).

In addition to complete hydroponic kits, American Hydroponics also manufactures individual components. We offer automatic nutrient and pH dosing controllers, and 2-part powdered Evolution Solution for those of you who want to save money by making your own concentrates. For larger operations, American Hydroponics also manufactures commercial NFT systems.

For more information about the complete line of products available from American Hydroponics, consult your local retailer or visit us online at: [www.amhydro.com](http://www.amhydro.com).

**Limit of Liability:** Under no circumstances, including, but not limited to, negligence, shall American Hydroponics be liable for any special or consequential damages that result from the use of, or the inability to use, the materials in these instructions, even if American Hydroponics has been advised of the possibility of such damages. Applicable law may not allow the limitation or exclusion of liability or incidental or consequential damages, so the above limitation or exclusion may not apply to you. American Hydroponics is not liable for damage due to omissions or typographical errors.