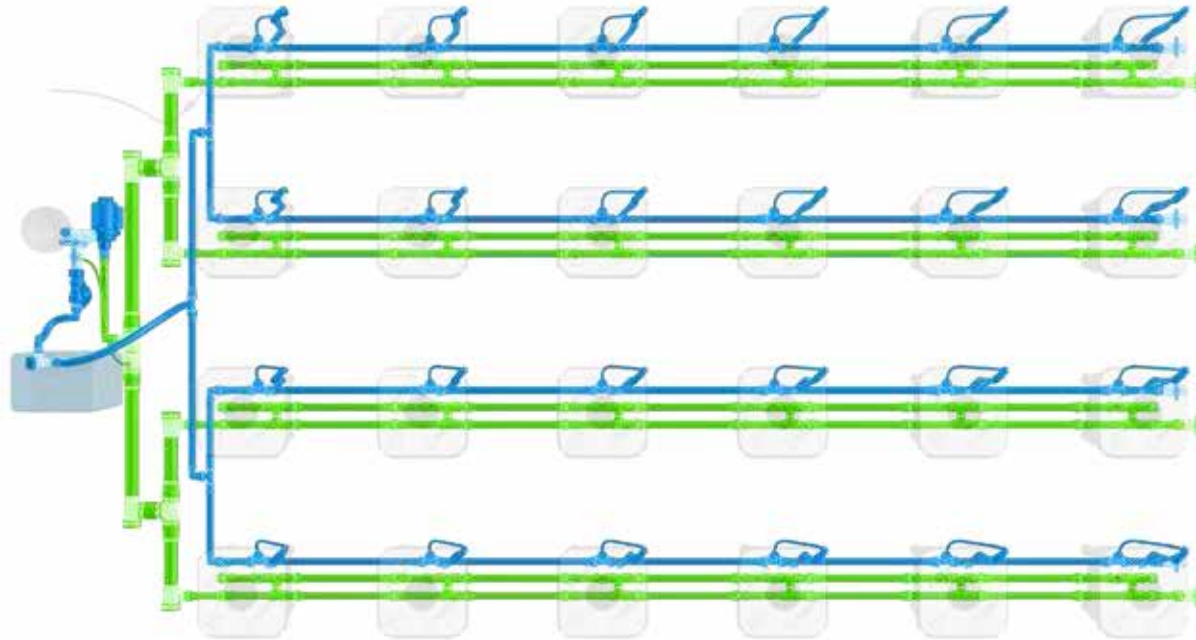


HydraMax Product Guide for 4-Row Systems



Overview: 4-Row System

Supply lines
Return lines



Supply lines

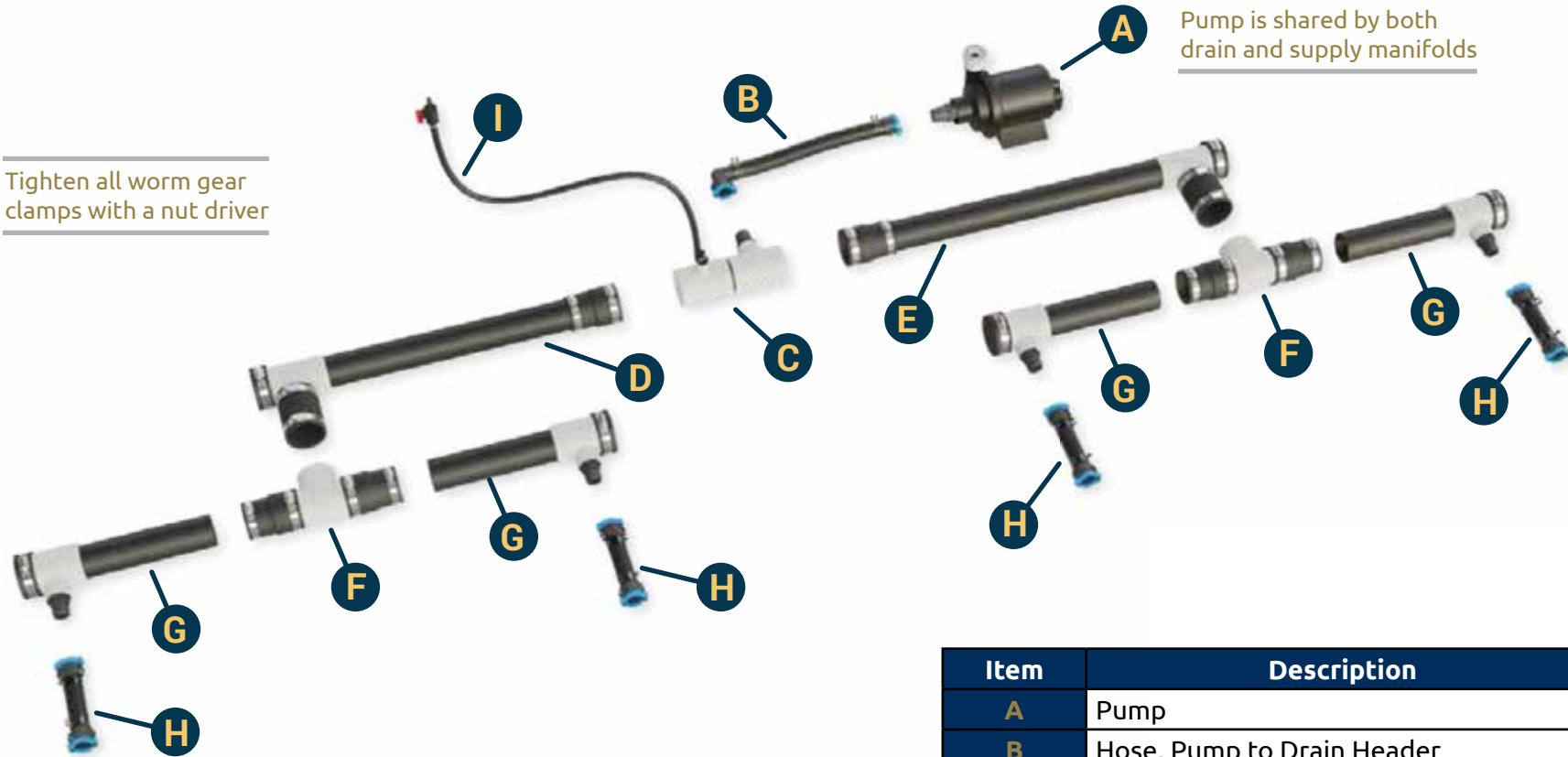
Return lines



4-Row Drain Header

Tighten all worm gear clamps with a nut driver

Pump is shared by both drain and supply manifolds



Item	Description	Qty
A	Pump	1
B	Hose, Pump to Drain Header	1
C	Header tee, tier 1	1
D	Header leg, short	1
E	Header leg, long	1
F	Header tee, tier 2	2
G	Header tee, tier 2	4
H	Hose, Header to Drain assembly	4
I	Bleeder Valve Assembly	1

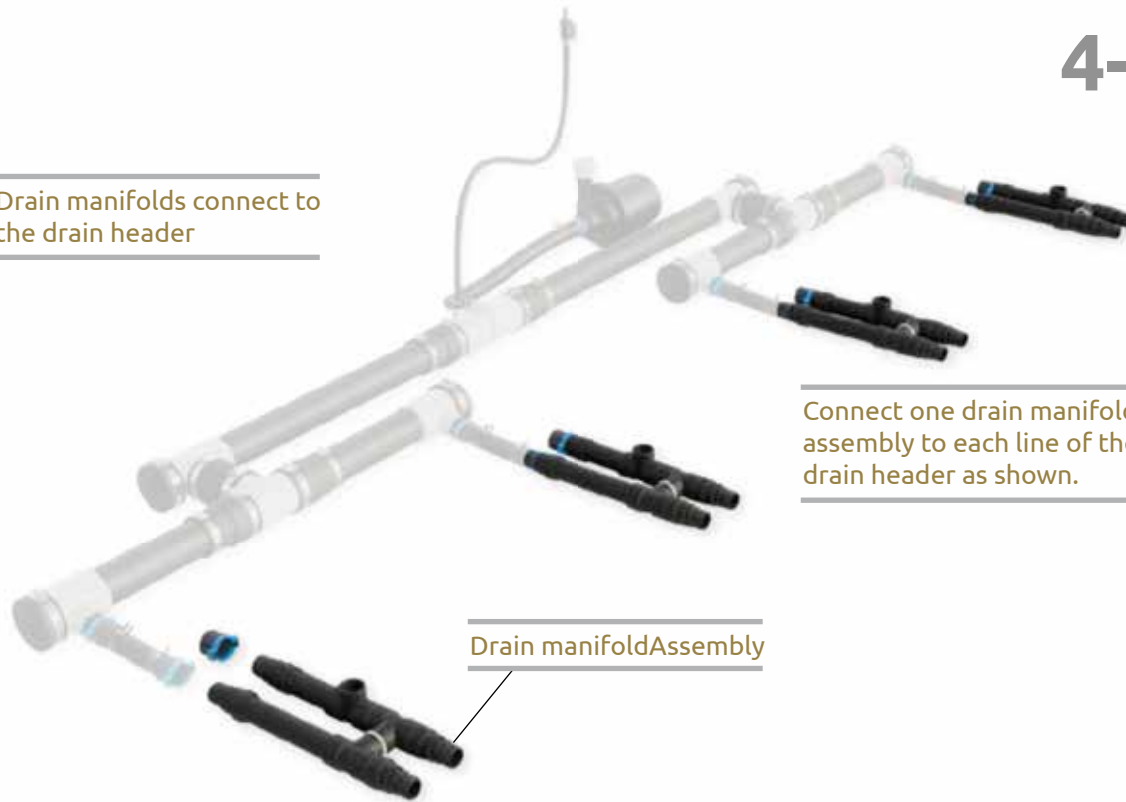
PRO TIPS:

- Locate and identify all parts before beginning assembly.
- Rotate worm gear clamps to top of flexible manifold couplers before tightening.
- Be sure to put all Qwik-Lok sockets into the locked position

4-Row Drain Manifolds

First Set

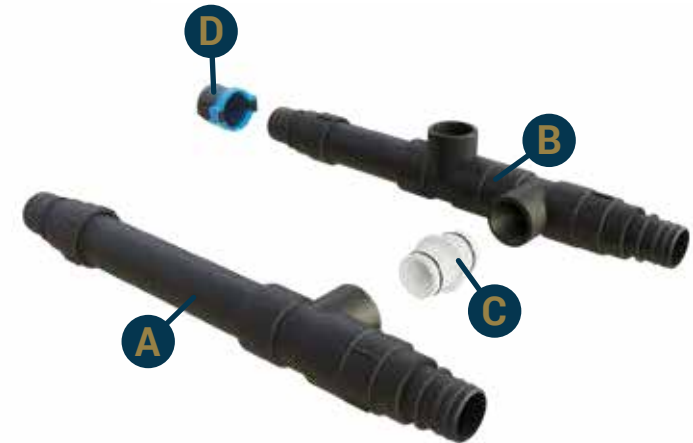
Drain manifolds connect to the drain header



Drain manifold Assembly

Connect one drain manifold assembly to each line of the drain header as shown.

Orifices are shown here in white. See the Orifice Color Guide for correct orifice color and order



PRO TIPS:

- Locate and identify all parts before beginning assembly.
- Refer to Orifice Color Guide on page 7 for correct color and order of orifices for your size system.

Item	Description	Qty
A	Drain Manifold, left	4
B	Drain Manifold, right	4
C	Orifice	4
D	Qwik-Lok Cap	4

4-Row Drain Lines

Additional Sets



Continue to add hoses and drain manifold assemblies until the desired number of bucket sites is reached. A 12-site system is shown in this example



PRO TIPS:

- Locate and identify all parts before beginning assembly.
- Continue to add hoses and drain manifold assemblies until the desired number of bucket sites is reached.
- Refer to Orifice Color Guide on page 7 for correct color and order of orifices for your size system.

Item	Description	Qty
A	Hose, straight x straight	2 per bucket



4-Row Drain Ends



Finish each row by installing a Qwik-Lok Cap, a hose and ball valve onto the ends of each row as shown.

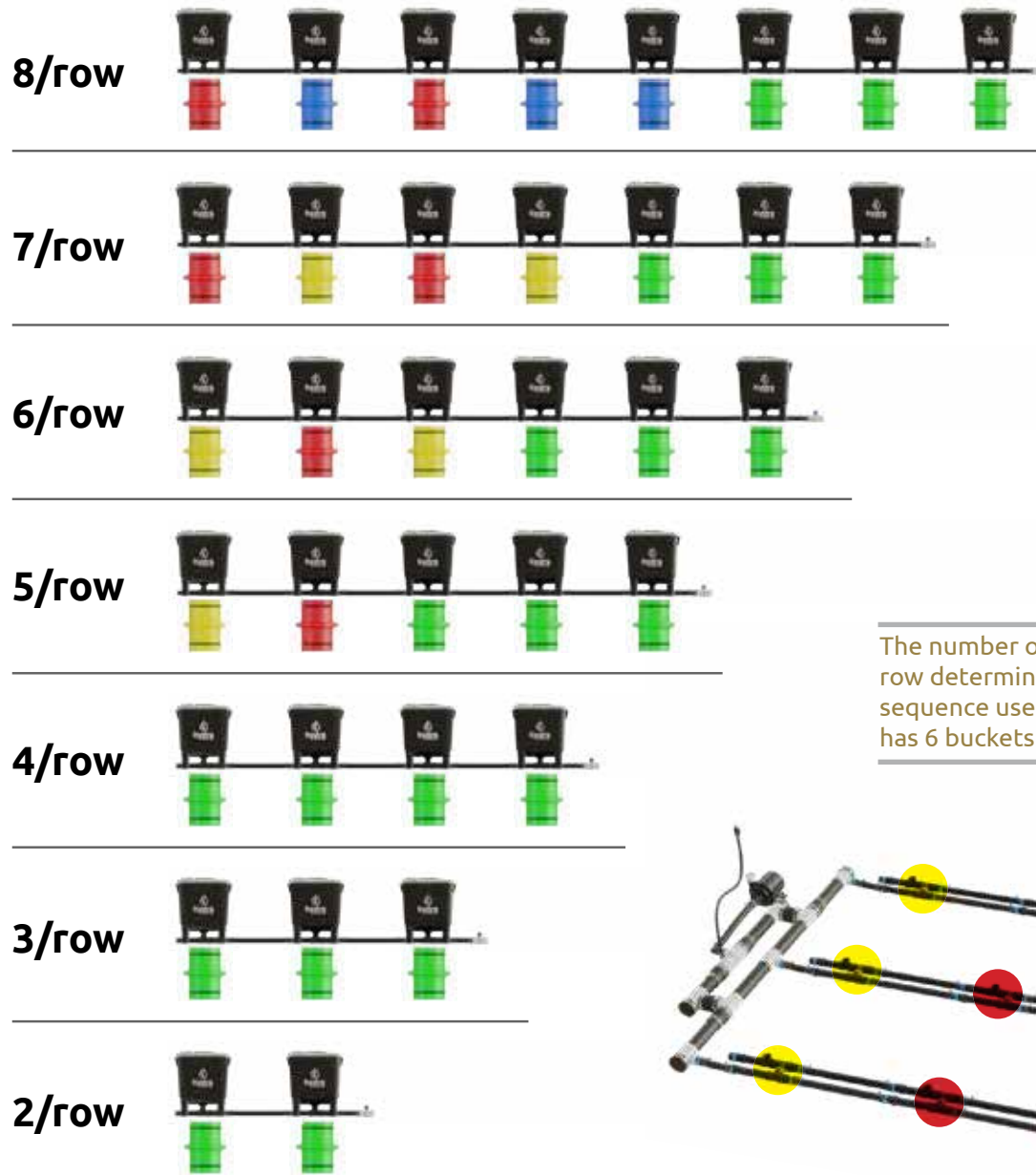
Make sure each ball valve is in the closed position as shown here.



- PRO TIPS:**
- Locate and identify all parts before beginning assembly.
 - Place a Qwik-Lok Cap, a hose and a ball valve at the end of each row as shown.
 - Be sure to lock each Qwik-Lok socket once connected.
 - Make sure all three valves are in the closed position.

Item	Description	Qty
A	Qwik-Lok Cap	4
B	Hose, straight x straight	4
C	Ball Valve	4

PUMP SIDE



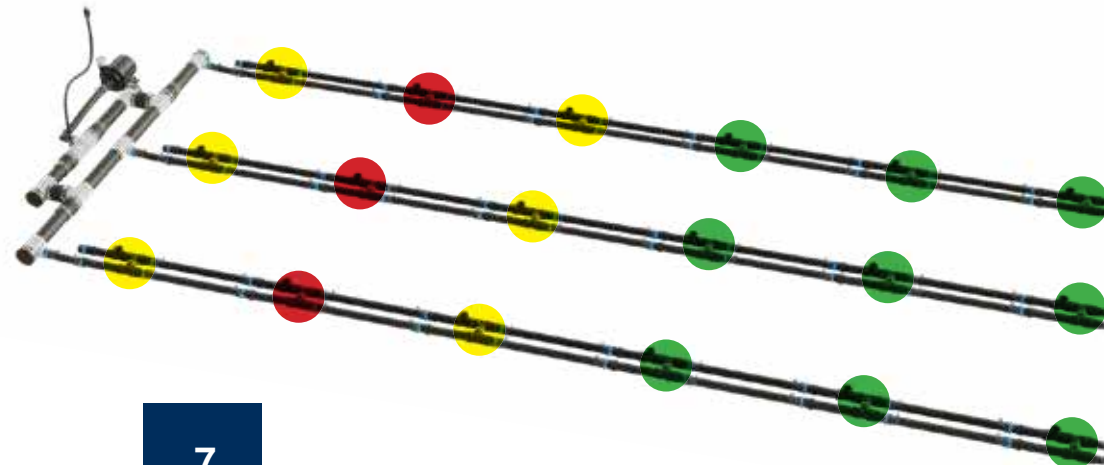
Drain Orifice Guide

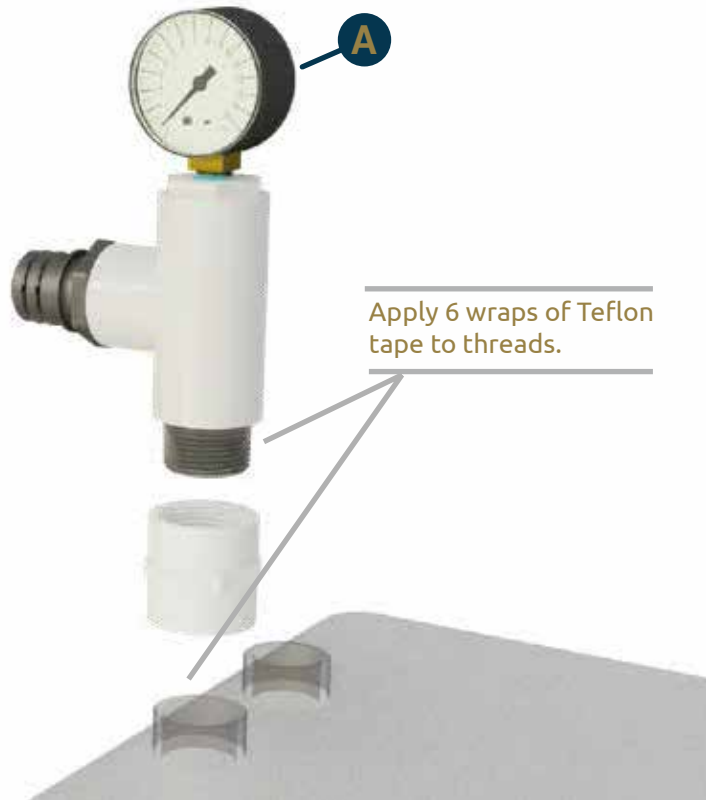
IMPORTANT!

Each HydraMax System comes with a set of color-coded orifices. **It is very important that these orifices are located in the correct positions for each specific system.** If the orifices are placed incorrectly, the system will not work properly. Use the diagram to determine the order and placement of the orifices for your system.

Orifice locations are determined by the number of buckets in a row.

The number of buckets in each row determines the color sequence used. This example has 6 buckets per row.





Apply 6 wraps of Teflon tape to threads.

PRO TIPS:

- Wrap threaded side of pressure gauge assembly with 6 wraps of Teflon tape before installation.
- Gently thread pressure gauge assembly into strainer. **IMPORTANT** - Do not use the gauge for leverage when installing onto strainer, this could damage the assembly.
- Check the gauge periodically for the first 30-60 minutes while air works its way out of the system. Minor adjustments may be necessary.

Pressure Guide

HA-035

Pressure gauge installs between strainer and chiller.

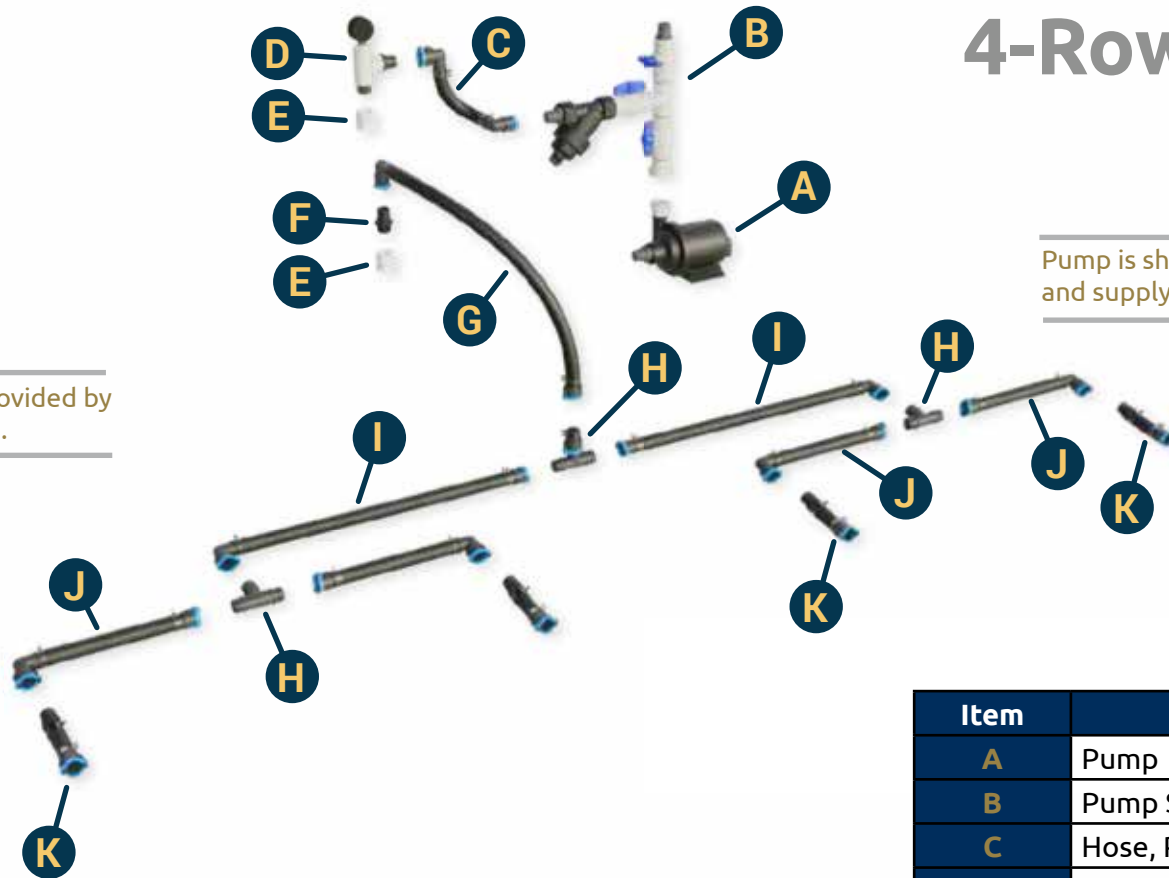


Slowly open ball valve until the desired pressure is reached.



Item	Description	Qty
A	Pressure Gauge assembly	1
B	Teflon Tape (not shown)	1

4-Row Supply Header



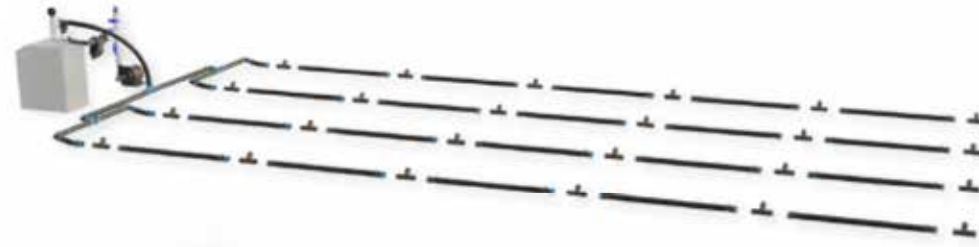
In-line chiller to be provided by grower (not included).

Pump is shared by both drain and supply manifolds

Item	Description	Qty
A	Pump	1
B	Pump Stack	1
C	Hose, Pump Stack to Pressure Gauge	1
D	Pressure Gauge Assembly	1
E	Chiller Adapter	2
F	1" NPT Adapter	1
G	Hose, Chiller to Header	1
H	Qwik-Lok tee	3
I	Hose, tier 1, straight x elbow	2
J	Hose, tier 2, straight x elbow	4
K	Hose, male QL x straight	4

PRO TIPS:

- Locate and identify all parts before beginning assembly.
- Be sure to put all Qwik-Lok sockets into the locked position.
- 1" NPT fittings may require an adapter to connect to your specific make and model of in-line chiller.



4-Row Supply Lines

Continue to add hoses and tees until the desired number of bucket sites is reached. An 18-site system is shown in this example.



PRO TIPS:

- Locate and identify all parts before beginning assembly.
- Add a tee to each row of the supply header for the first set of buckets.
- Add a Supply hose and tee for each additional bucket in the system.
- Be sure to lock each Qwik-Lok socket once connected.

Item	Description	Qty
A	Qwik-Lok tee	1 per bucket
B	Hose, straight x straight	1 per bucket*

*One per bucket excluding the last set of buckets

Finish each row by installing a hose and ball valve onto the last tee of each row.

4-Row Supply Ends



Make sure each ball valve is in the A closed position as shown here.



PRO TIPS:

- Locate and identify all parts before beginning assembly.
- Place a hose and ball valve at the end of each row.
- Be sure to lock each Qwik-Lok socket once connected.
- Make sure all three valves are in the closed position.

Item	Description	Qty
A	Hose, straight x straight	4
B	Ball Valve Assembly	4



Bucket Assembly

PRO TIPS:

- Locate and identify all parts before beginning assembly.
- Once legs are in place, press bucket down firmly to fully seat each leg.
- Inspection port cover includes a slotted area to allow for probes or tubing to enter the bucket. Keep the port closed when not in use

Items	Description	Qty
A	8-Gallon bucket	1
B	Bucket Lid	1
C	Inspection port lid	1
D	Bucket Leg	4
E	5.5" Net pot	1

Bucket Installation

Place each bucket over a drain manifold and carefully seat into place.



PRO TIPS:

- Viewing from above, look through the drain fitting and align each bucket over a drain manifold.
- Carefully inset the bucket drain fitting into the drain manifold making sure each is fully seated and level.
- Do not place the lids on at this time



Circulators

3/8" tubing must be cut to length. 24" is typically enough for each Circulator.



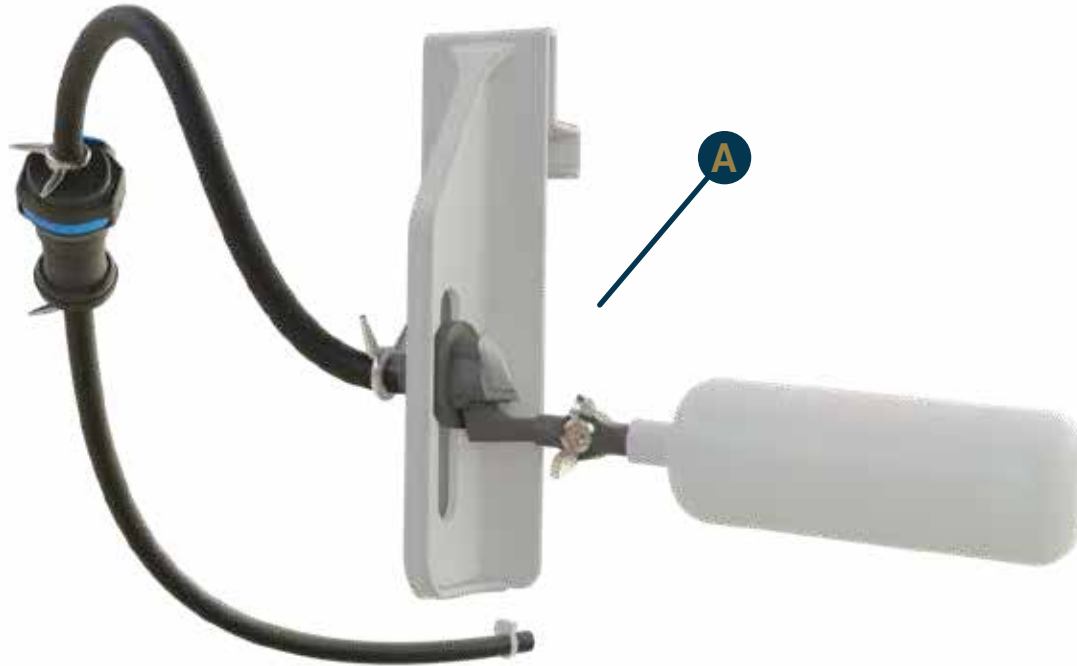
Place one circulator in the corner of each bucket and connect to supply line tee.

PRO TIPS:

- Locate and identify all parts before beginning assembly.
- Place a hose and ball valve at the end of each row.
- Be sure to lock each Qwik-Lok socket once connected.
- Make sure all three valves are in the closed position.

Item	Description	Qty
A	Circulator	1 per Bucket
B	Spring Clamp	2 per Circulator
C	3/8" Tubing	24" per Circulator
D	Qwik-Lok x 3/8" Barb	1 per Circulator

Refill Valve



PRO TIPS:

- Locate and identify all parts before beginning assembly.
- Slide valve into approximate desired water level location and then fine tune the float with the wing nut.
- Refill valve may be placed in any bucket in the system. Use the bucket most convenient to your water supply.

Item	Description	Qty
A	Refill Valve Assembly	1



Let's talk Green

Address

Benzstraße 18
89079 Ulm
Germany

Contact

info@green-cult.com
Phone: +49 731 14414 219
www.green-cult.com