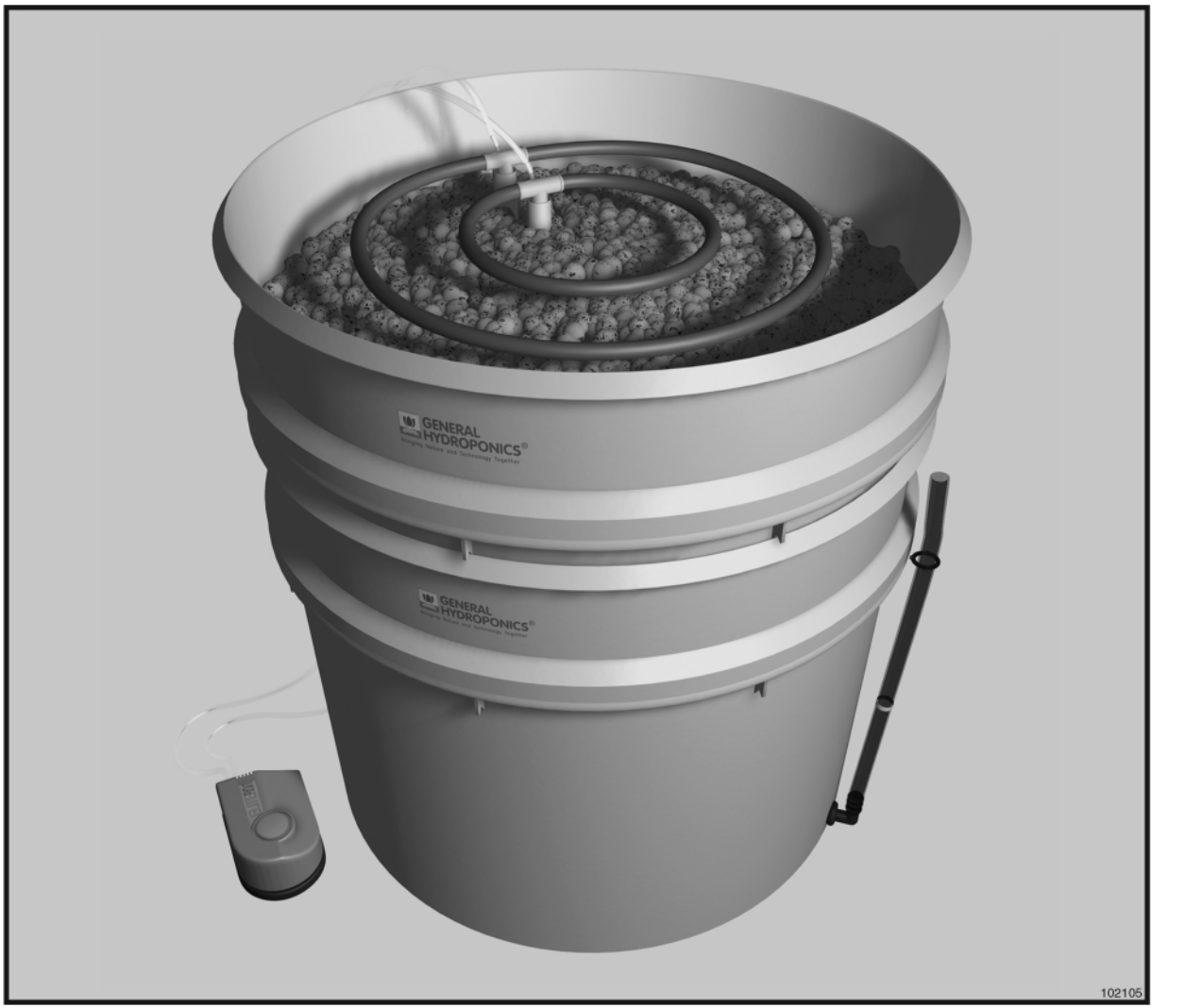
GENERAL HYDROPONICS®

Bringing Nature and Technology Together

MegaFarm™

Assembly Guide



MegaFarm™ Parts

1. CLAY PELLETS
(50 and 25 Liter bag)

2. FLORA SERIES NUTRIENTS
(16oz bottles)

3. RESERVOIR
(chamber for water)

4. GROWING CHAMBER
(pot with perforated bottom)

5. ELITE 802 AIR PUMP

6. AIR LINE
(clear tubing)

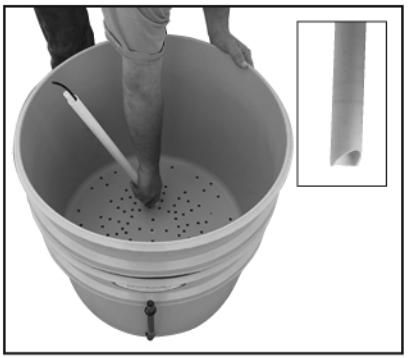
7. DRIP RINGS, Inner & Outer
(circular plastic rings attached to tees)

8. PUMPING COLUMNS & SUPPORT TUBES
(pre-assembled)

9. DRAIN LEVEL TUBE
(translucent blue tube fitted to black elbow)

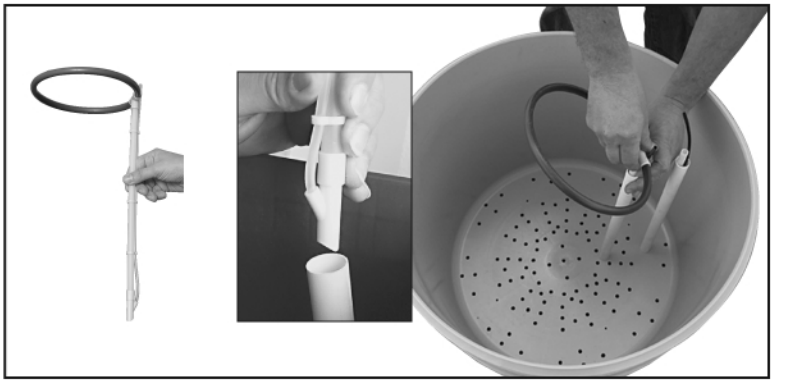
Step #1.
Install the blue drain level tube along the outside of the reservoir. Moisten the end of the elbow fitting and push it through the rubber grommet from the outside until the third ridge enters the grommet. As you push, place your other hand inside the reservoir on the grommet to support it, so the grommet does not pop out. The tube fits into the clip at the top of the reservoir. If the grommet pops out, push it back in from the outside (the narrow end points inward). If water leaks from the drain level tube after the reservoir is filled, make sure all connections are secure. Fill the reservoir to one inch above the white line marked on the blue drain level tube with tap water. Add General Hydroponics nutrients as per directions on the label.

Step #2.
Place the growing chamber on the reservoir.



Step #3.
Push the pumping and support column assembly (bevel facing down) through the large holes in the bottom of the growing chamber so they protrude into the reservoir. Adjust the pumping columns so the top is one inch below the rim of the growing chamber.

Step #4.
Attach the circular brown drip ring to the tee fitting. Make sure the holes on the drip ring are facing downward.

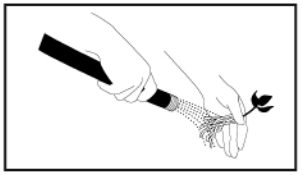


Step #5.
Attach the drip ring to the pumping column inside the support column. It is a good idea to disassemble and wash the pumping column and drip ring from time to time in hot water.

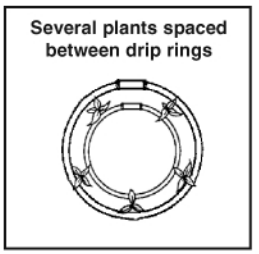
Step #6.
Rinse the clay pebbles before pouring them into the growing chamber. Move the drip rings out of the way and pour the clay pebbles into the growing chamber until the level is just below the drip rings.

Step #7.
Securely attach one end of the clear air tube to the small flexible tubing connected to the pumping column assembly and the other end to the outlet nipples on the air pump for each of the pumping columns. Plug the air pump into any standard household electrical outlet. If you are using your MegaFarm outside, use only extension cords and outlets designed for outdoor use.

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 into the MegaFarm. 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. Or, you can avoid these problems by starting plants from cuttings in one of our **RainForest** Systems.



If you plan to grow several small plants in the MegaFarm, place your plants between the drip rings, near the drip holes. If you prefer a single large plant, place it in the center of the drip rings. Gently add clay pebbles around the plant roots until thoroughly covered.

Placement

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

Operation

For moisture-loving plants, operate your MegaFarm pump continuously. Plants preferring drier conditions grow best when the pump runs for 1/2 hour on and 1 hour off during daylight hours; off at night (a simple timer will turn the pump on and off for you automatically).

Use mild to normal strength nutrient solution and avoid strong or aggressive nutrient. As your plants consume nutrient solution, the level in the reservoir will drop. Top off with half strength solution or plain water (the pump is more efficient when the reservoir is full). It is necessary to change the water and nutrients every two to three weeks depending upon the size of your plants and their rat e of growth; with bigger plants change more often. Simply empty the reservoir by **rotating the blue drain/level tube 90 degrees** so water drains on the ground, or indoors in a pail. When changing or topping off solution, pour directly over the clay pebbles (rather than into the reservoir itself) to flush out excess salts.

Preparation for Replanting

After harvesting and before replanting your MegaFarm, dismantle the system and clean all parts with hot water. Rinse clay pebbles in very hot water and soak overnight. Unlike Rockwool, clay pebbles are reusable. It is a good idea to dis-assemble and wash the drip ring assemblies and pumping tube from time to time in hot water.

Troubleshooting

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 MegaFarm.

If nutrient solution stops flowing from the drip ring:

1. Check to ensure that pump is plugged in and reservoir is filled with nutrient solution.
2. Disconnect air line from the air inlet and check whether the air is coming through (put end under water and look for bubbles if you are not sure). No air flow could mean that the pump is broken and must be replaced or that the air line is loose or blocked. Try cutting an inch off each end of the line to provide a tighter fit.
3. Blow into the air inlet to check whether it is clogged, and rinse the pumping column in hot water. This type of clogging is usually an indication that you have hard water or too strong a nutrient solution.
4. Check whether emitter holes in the drip ring are clogged. To clear, dis-assemble drip ring by pulling it apart at the tee, rinse drip ring and tee in hot water and clear the holes with a toothpick.

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