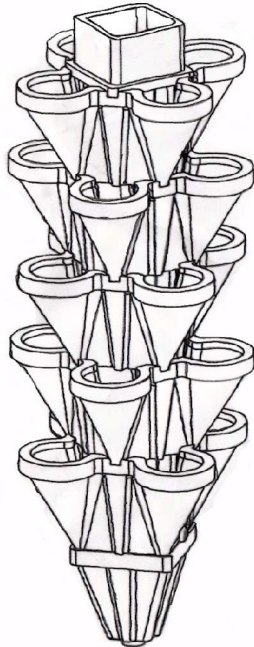


HYDRO-STACKER™

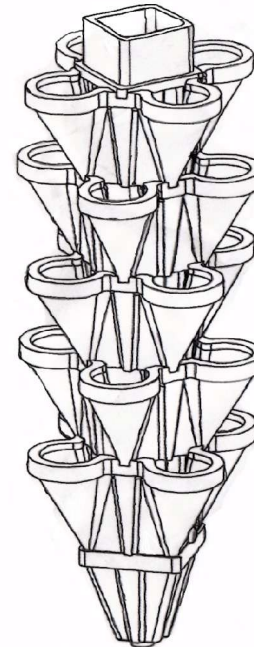
www.hydrostacker.com

“WHAT GROWERS PREFER”



P.O. Box 20685
Bradenton, Florida 34204
941-739-6511

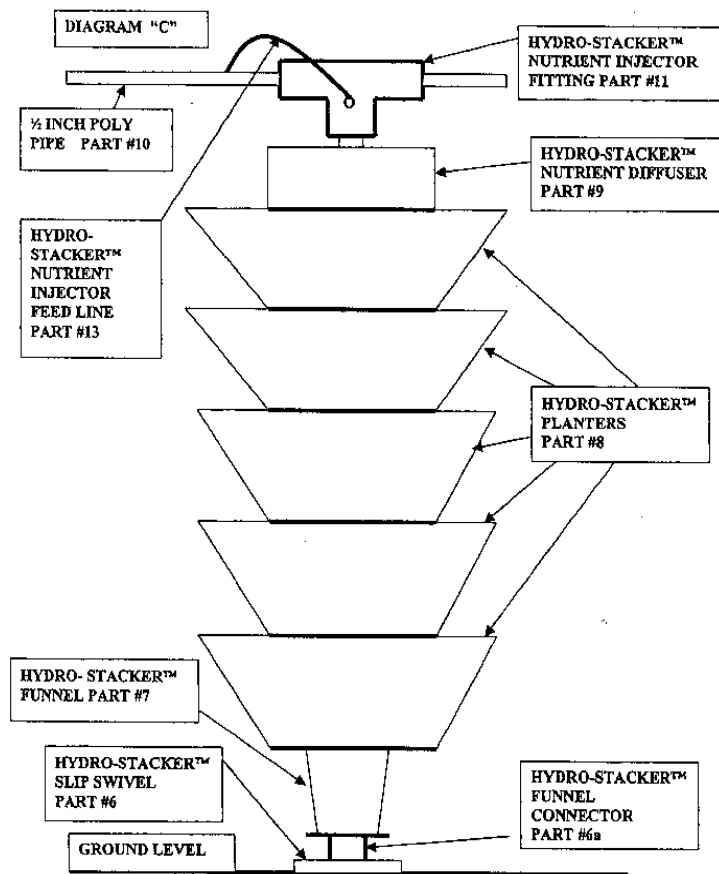
HYDRO-STACKER™



INSTALLATION MANUAL
TIMER ELECTRIC FEED

Notes

Thank You for Choosing
HYDRO-STACKER™



HYDRO-STACKER™ INSTALLATION MANUAL

- SITE LOCATION FOR GOOD GROWING CONDITIONS
 - TOOL LIST FOR INSTALLING THE HYDRO-STACKER™ UNIT
 - COMPLETE PARTS LIST
 - INSTRUCTIONS FOR INSTALLING THE HYDRO-STACKER™ UNIT WITH ONE, TWO, THREE, FOUR OR TEN STACKS
-
- DIAGRAM “A”
 - DIAGRAM “B”
 - DIAGRAM “C”
 - NUTRIENT FEEDING
 - pH BALANCING YOUR WATER
 - PLANTING YOUR GARDEN

**DO NOT ATTEMPT TO INSTALL YOUR
HYDRO-STACKER™ UNIT UNTIL YOU READ
THIS MANUAL FIRST.**

SITE LOCATION AND PREPARATION

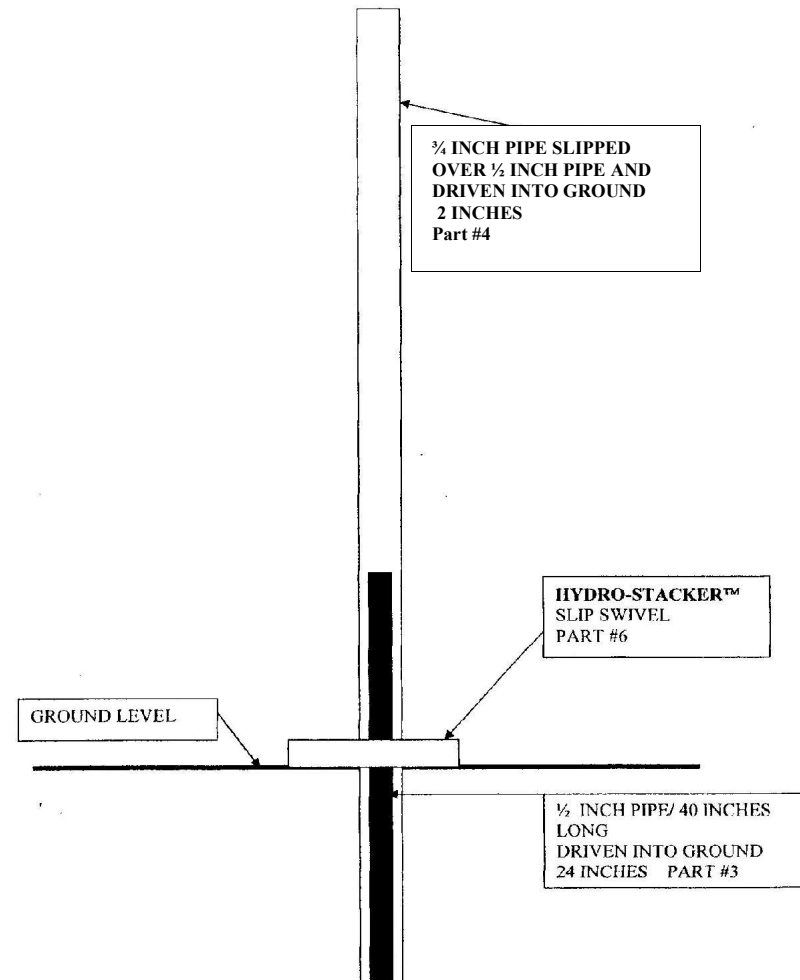
DIAGRAM "B"

Welcome to the wonderful world of Hydroponic growing. Growing hydroponically will make your gardening experience fun and exciting.

Here are a few thoughts and suggestions on the issues of where to put your garden and how to prepare the area around it for growing hydroponically.

Some suggestions:

1. You will need a location with full sun for vegetables.
2. If you are going to plant flowers, decide if your plants are going to be annuals or perennials, as some flowers need only small amounts of direct sunlight while others like full sun. Read the planting label that comes with your plants.
3. Use a North-South direction layout if possible. Your plants will get all the light they need and shading will not be a problem. If this is not possible, an East-West location will work, just be sure to maximize the sunlight as much as possible.
4. A location with a small amount of downhill grade will help keep the soil under the ground cloth dry.
5. Your location needs to have a smooth surface so the rotating of the HYDRO-STACKERS™ will be more effective.
6. Remove grass and weeds in an area 3 feet wide and the length of the supplied ground cloth. Rake the surface until smooth and level.
7. Make a level area for your HYDRO-STACKER™ nutrient reservoir.
8. You will need an electrical outlet for the timer to be connected to.
9. A water source to fill the reservoir will also be needed.
10. Visit www.hydrostacker.com and review the installation photos.



HYDRO-STACKER™ PARTS LIST

1. GROUND CLOTH
2. GROUND CLOTH PINS
3. PIPE ½" – 40" LONG PER PLANTER
4. PIPE ¾" – 60" LONG PER PLANTER
5. BOLT 7/16" & FLAT WASHER
6. HYDRO-STACKER™ ROUND SLIP SWIVEL PLATE
- 6a. HYDRO-STACKER™ FUNNEL CONNECTOR
7. HYDRO-STACKER™ FUNNEL
8. HYDRO-STACKER™ PLANTER
9. HYDRO-STACKER™ NUTRIENT DIFUSSER
(TAPED INSIDE ONE OF THE PLANTERS FOR SHIPPING)
10. ½" WHITE POLY PIPE
11. HYDRO-STACKER™ NUTRIENT INJECTOR FITTING
12. FIGURE 8
13. NUTRIENT INJECTOR FEED LINE
14. GREENBACK PRESSURE REGULATOR VALVE
15. ½" POLY HOSE CLAMPS
- 15a. ½" POLY LINE 90 DEGREE ELBOW
16. ELECTRIC NUTRIENT PUMP
17. ELECTRIC DIGITAL TIMER
18. YELLOW NUTRIENT FEED LINE TOOL

REMEMBER!!!

**IF ANY PARTS ARE MISSING CALL OUR
24-HOUR HOT LINE.**

941-739-6511

**NOTE: If any parts are missing, please call our
HOT LINE IMMEDIATELY!! HOT LINE number
(941) 739-6511.**

INSTALLING THE HYDRO-STACKER™

20. Take the 2 lb package of Secret Sauce marked Part “A” and mix with 1 gallon of regular water (This water does not need to be pH balanced.) Mark your container “A.” Make sure contents are totally dissolved before using.
21. Now take another one-gallon container and mark it “B.” Fill the container with regular water and put in Secret Sauce Part “B.” Make sure contents are totally dissolved before using.
22. It takes $\frac{3}{4}$ tablespoon of concentrated Part “A” and Part “B” per gallon of water to make a mixed solution. In 50 gallons it would take 12 fluid ounces of Part “A” and Part “B”. Consult the enclosed brochure for other size container mixtures. If you have an EC meter, it should read 1.6 to 1.8. This is an ideal level for growing any vegetable.
23. Take the electrical plug from the pump and insert it into the timer and follow the directions for setting the timer. You want to feed three times daily for three minutes. Some plants, such as tomatoes may need more feeding. This will depend on temperature, climate and location.
24. When the pump turns on, check the flow rate to the plants, adjust the Greenback Pressure Regulator Valve to set the correct amount of nutrient flow. The correct amount of flow should be when one quart is dispensed in three minutes. Remember to feed the plants only as needed. Do not feed in the evening or after dark. Plants need light for growth.
25. Now you are ready to begin enjoying your HYDRO-STACKER™ Growing unit. You will be amazed at how rapidly your plants will grow. Your vegetables will taste better. Enjoy!

1. Layout the black ground cloth (Part #1) that came with your HYDRO-STACKER™ unit. Try to lay it out North to South (Diagram “A”).
2. Starting at one end of the ground cloth, roll about an inch of material under and put a stainless steel pin (Part #2, Diagram “A”) in each corner. Stretch the cloth snugly. Now work out the wrinkles as you go towards the opposite end. Put the stainless steel pins (Part #2) in about three feet apart lengthwise and use three pins across. Extra stainless pins come in the kit so make sure the cloth is snug. When you get to the end, roll under about an inch and put in the stainless steel pins (Part #2).
3. Measure 24 inches from one end of the ground cloth (Diagram “A”) and then measure 18 inches from one side and put a mark. This is where your first $\frac{1}{2}$ inch pipe, 40 inches long (Part #3) will be driven into the ground. Continue to layout for the number of pipes in your kit.
4. Lay out your $\frac{1}{2}$ inch pieces of pipe (Part #3, Diagram “A”) and measure from one end 24 inches and put a reference mark. This is how deep the pipe will be driven into the ground (Diagram “B”). Take the $\frac{1}{2}$ inch pipe and insert the $\frac{7}{16}$ bolt (Part #5) in the end that is the shortest distance to the mark you made. This bolt will prevent the end from flaring and making it difficult to slip the $\frac{3}{4}$ inch pipe over it (see step #5 below.) The longest end will be the end driven into the ground. Put the end on the cloth and twist it to cut through the cloth. Now drive the pipe into the ground and check to make sure it is level. This will make your planters stand straight up. Drive all the pipes that came with your kit into the ground. Be sure to remove the bolt when you are finished.
5. Take the $\frac{3}{4}$ inch pipes (Part #4) and slip it over the $\frac{1}{2}$ ” pipe (Part #3). The total height of the pipe should be 54” from the ground. If the pipe is higher, you can use the bolt and

washer (Part #5) to drive it into the ground.

Page 5

6. Take the HYDRO-STACKER™ round swivel plate (Part #6) and put it over the end and let it slide down the pipe to the ground (Diagram B). This will allow your HYDRO-STACKER™ planters to turn freely. Install one for each pipe you have driven into the ground.
7. Slide one HYDRO-STACKER™ Funnel Connector (Part #6A) onto each ¾ inch pipe supplied with your HYDRO-STACKER™ kit (Diagram C).
9. Slide the HYDRO-STACKER™ Funnel (Part #7) over each of the ¾ inch pipe (Diagram C). Be sure to remove the funnel from inside the planter. This was done for shipping.
10. Thoroughly mix both bags of media 50/50 and wet thoroughly.
Take one HYDRO-STACKER™ planter (Part #8) and fill it with the wet media. (Note: Put a piece of tape over the large hole and remove it when you put the planters onto the ¾ inch Pipe, Part #4.) Fill all planters to just below the top of the sides. If you overfill the planter, they will not lock onto each other. There should be no air gap between planters and media.
11. Put each HYDRO-STACKER™ planter (Part #8) over the ¾ inch pipe (Part #4) until there are five stacked on each pipe (Diagram C).
12. Now take the HYDRO-STACKER™ Nutrient Diffuser (Part #9) and put it on top of the last HYDRO-STACKER™ planter (Part #8, Diagram C). Fill the Diffuser half full with media.
13. Locate the white ½ inch poly pipe (Part #10, Diagram C) and thread it through the opening of each HYDRO-STACKER™ Nutrient Injector Fitting (Part #11). When you get to the end that will be closed off, install the figure-eight shutoff (Part #12). Slip the figure-eight shutoff (Part #11) over the ½ inch poly pipe and go far enough to bend over 3 inches of poly pipe and then move the figure-eight back towards and over the bent end. This will tightly close the end of the poly pipe.

Page 6

14. On the open end of the ½ inch poly pipe you will need to install the Greenback Pressure Regulator Valve (Part #14) and clamp (Part #15). This valve is critical for the proper amount of nutrient to flow to the diffusers. The long part of the handle should be located towards the nutrient injector feed line (Part #13).

Enclosed is a

- 90 degree fitting (Part # 15a) in case you want to make your line go into your reservoir vertically.
15. Take the reservoir you will be using and drill a hole that will allow the ½ inch poly pipe (Part #10) to go through the top. Attach the ½ inch poly pipe to the electric pump (Part #16). The wiring for this pump is made to be submerged into nutrient. (Do not submerge electrical plug.)
16. Attach the ½ inch poly pipe (Part #10) and clamp (Part# 15) that is coming from the electric pump assembly to Greenback Pressure Regulator Valve (Part #14). Be sure that pump is seated firmly in the reservoir. There should not be any kinks or bends in this line.
17. Locate a good place for the supplied timer (Part #17). It needs to be secured firmly.
18. Take the Yellow Install Tool (Part #18) and make a hole in the ½ inch poly pipe close to each of the diffusers. As soon as you make the hole firmly push the nutrient feed line (Part #13) in the hole. Take the other end of the nutrient feed line and feed it through the small hole located in the HYDRO-STACKER™ Nutrient Injector Fitting (Part 11, Diagram C). Be sure to push enough to secure it in the fitting.
It should not bind or bend. If it binds or is bent, nutrient will not flow freely.
19. Fill the reservoir with water, check the pH level and

adjust it to 5.8pH. See enclosed brochure on how to properly adjust the pH of your water.