



Intelligent Irrigation LLC

General Directions for installing The AquaJet in a Raised Bed Garden

These are general directions for installing the AquaJet in a raised bed garden. The way the water source is brought to the bed will vary between customers so we will focus on just the bed and the AquaJet.

Installing 2 AquaJets in a Raised Bed

1. Install a 150 mesh filter before the AquaJet as seen in figure 1. This MUST be installed at the valve or just before the water goes into the bed. This will keep out foreign objects and keep the AquaJet from clogging due to debris. You will also need 2, $\frac{3}{4}$ to 1 inch bushings and 2, 1 inch PVC couplers. The filter is now ready to install. (See pic below)



Fig-1

2. Anti-Siphon device.

You need an anti-siphon valve properly installed for the AquaJet to drain and aerate.



3. Trenching

Make a 4 inch trench for the AquaJet to lay in. The AquaJet should be 4 inches or less from the top of the surface to the bottom of the AquaJet. You will also need to trench across the bed connecting the trenches at the beginning and at the end if you are making the loop with the dual AquaJet design



4. After you install the filter and anti-siphon valve and make the trenches you are ready to install the AquaJet. Now you need to bring the water source to the AquaJet. We recommend 1 inch PVC or larger. How you bring the PVC into the bed will vary depending on your preference. After you bring the water source into the bed you will need to split your one line into 2 for the 2 AquaJets. This is done by applying a PVC TEE to feed both lines. (See below)



5. The Bottom of the 1 inch PVC TEE can be 2 to 3 inches below the surface (See Below). With the PVC TEE 2 to 3 inches below the surface the AquaJet will now be 3 to 4 inches below the surface once the adapter is installed.



6. Measure the width of your bed and divide that number by 4 and that will be the spacing for the two AquaJet lines. For example if your bed is 4 ft. wide you divide that by 4, and you get 1 ft. or you can do inches so (48 in. divided by 4 = 12 in.) now you measure 12 inches from the edge of your bed and that is where the AquaJets will go. This is the formula to use for equal spacing of two AquaJets. So now you can cut and measure your PVC that will go into the tee. After you do this you are ready to apply the PVC EL. You can use a 1 to 1 ¼ inch el or a 1 inch el with 1 inch PVC pipe to connect the AquaJet adapter. (See pic below.) NOTE: Be sure your trenches in your bed are no deeper than 4 inches.



7. Mark a line on the top center of the PVC and the Top center of the el this will insure proper line up and keep the AquaJet level. (see pic below)



8. Mark the AquaJet Adapter with a line on the top center as well as the PVC El. When these two lines match up the AquaJet will be parallel and the water spray will be level. (Do not glue the AquaJet adapter into the PVC el yet.)



9. Glue the adapter onto the first length of the AquaJet. Apply the glue around the AquaJet you do not need a thick layer of glue. You can go to the following link on You Tube to see a video on cutting and gluing the AquaJet.

<https://www.youtube.com/watch?v=BLxS96HImI4&list=UUjf1qmrp1qqwGXPevo35dQ>

After you apply a thin layer of PVC glue around the AquaJet quickly apply a little glue to the adapter but not to the bottom or small side The picture below shows where not to put the glue.



10. The picture below shows you where to put the PVC glue.



10 Now you are ready to glue the AquaJet with the adapter glued on to it to the PVC el, Make sure you line up the two lines that you made (see picture below) Apply the glue to the outside of the round part of the adapter and to the inside of the PVC el, slide it in and line up the two lines that you made. You are now ready to glue the coupler.

If you connect the AquaJet adapter with a 1" PVC elbow or coupler then you would apply the glue to the outside of the round PVC and to the inside of the AquaJet adapter and PVC elbow



- 11.** Now you are ready to glue the first coupler. Put a board or PVC under the end of the AquaJet to hold it up in the air and not in the dirt. Put a thin layer of glue around the AquaJet like the picture below.



12. Quickly apply a thin layer of glue to the large curve of the coupler and the sides of the coupler but **not the small curve**



13. Do not put glue on the small curve of the coupler you see this pointed out in the picture below. The glue that is on the AquaJet will be enough for this to seal.



14. Repeat these steps for each length of AquaJet

After you get to the end of the bed and you have glued the last piece of AquaJet let the glue dry for a couple of hours. **Do not glue the Adapter/End cap on yet.** Prop the AquaJet up out of the trench with a piece of PVC or Wood so that it is not lying in the dirt (trench)

15. Now it is time to flush the system in case you have debris in the line from installing. This should clear all the debris. You can connect PVC pipes without gluing if you want to flush the water out of the bed (See illustration below) or just prop up the AquaJet and flush.



16. If you are connecting the two AquaJet lines together so the water will circulate then you will need to put a PVC el on each adapter at the end and connect them with a 1 inch PVC pipe and glue them together. You can use a 1 inch el with a short piece of 1 inch PVC to connect to the AquaJet adapter like the one on the left pictured below or you can use a 1 to 1 ¼ inch el to connect to the AquaJet adapter pictured below right.



17. If you are not making the loop and using the end caps then you can glue the Adapter/End caps on the end of the system and set it in the trench. Let the glue dry and you are ready to test the system. Turn it on and make sure all the jets are emitting water. After you have tested the system it is now time to cover it up with the soil.



18. After you have covered the AquaJet it is now time to hydrate the soil. First water on top with a hose and soak your soil completely. Now turn on the AquaJet again to continue hydrating the bed.



Now you are ready to plant your Fruits & Vegetables. If you plant seeds we recommend watering on top for the first few days.

Please visit & subscribe to our You Tube Channel where we have videos that will help with your installation of the AquaJet.

<https://www.youtube.com/channel/UCjf1qmrp1qqwGXPEvzo35dQ>

