

# Daisy Machines

## Eight Site Cloner and Four Site Aero

This unique cloning machine offers commercial quality components at an economical price. A high-pressure mist sprays the cuttings and roots appear within days. This system is ideal for schools, research & development and hobbyists. Root up to eight or four plants at a time.



### Clone 8 Components



### Aero 4 Components



**NOTE:** Systems contain some additional replacement parts.

### Daisy Assembly

- 1 Pull all of the system components out of the reservoir.
- 2 Thread the Feed Manifold onto the pump. Install spinner if not already installed.
- 3 Place the pump at the bottom of the reservoir, the pump is fully submersible and will operate at the bottom of the reservoir.
- 4 Align the manifold in the reservoir so that it is centered.
- 5 Pull the pump cord out of the reservoir, and then position the lid on the reservoir. The reservoir has a small notch on one side, position the pump cord in this notch.
- 6 Insert a net pot into each hole in the lid.
- 7 Place a root guard (or neoprene insert) on each net pot.
- 8 Fill the reservoir with water, plug in the pump.
- 9 At this time test the pump with the spinner in the manifold.

**NOTE:** Make sure not to over tighten.

### Important Pump Maintenance

Your new system is equipped with a high quality submersible pump, however to insure pump longevity routine maintenance is required. The following maintenance procedures should be followed every 3 - 4 weeks, or if pump performance begins to decrease.

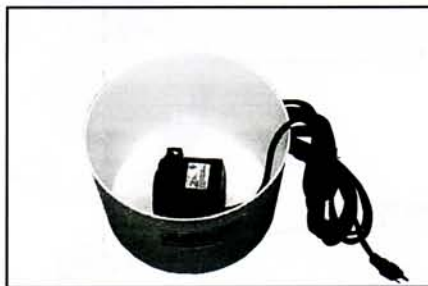
- 1 Disconnect the pump cord from the power outlet and remove from system.
- 2 Remove the main housing of the end of the pump, then rinse the debris out of the housing and prefilter.
- 3 Detach the impeller cover, and slide the impeller and shaft out of the pump.
- 4 At this time use a small brush to clean the impeller, shaft, and inside of the motor housing. **\*\*Do not use any soaps or detergents while cleaning\*\***
- 5 Slide the shaft back into the motor housing and then install the impeller cover. Make sure that the impeller cover is completely attached.
- 6 Reattach the main housing and reconnect your pump to your system.

### Aeroponic Instructions

- 1 Fill reservoir with water (purified or spring water is best).
- 2 Add nutrients as recommended per label. For seedlings and transplants, use nutrients at quarter to half normal strength.
- 3 Test pH and adjust to a level of 5.8 - 6.2
- 4 Fill each net pot approximately halfway full with grow rock; plant a seedling into each pot. Add more grow rock to the net pot to fill it to the top. The white root guards are supplied to use if you plan on growing without any grow media, they will position and support the plants. Root guards can also be used with grow media to block out light.
- 5 Place net pots into the holes in the lids of the trays.
- 6 Aeroponic growth can be attained by constantly running the pump and circulating water or by cyclical waterings. If cyclical waterings are desired consult your hydrogardening retailer for a cycle timer. For cyclical waterings the timer can be set for less watering during the evenings, or during rest periods for the plants. Optimum cycles are 1 minute on and 4 minutes off.

### Maintenance Procedures

- 1 Replenish water as needed. Add nutrients with additional water at 25 - 50 percent of the original strength.
- 2 The reservoir needs to be changed periodically, change about every 7 to 21 days.
- 3 Follow nutrient label recommendations for nutrient strength at each growth stage.



### Congratulations!

You have purchased the latest in hydrogardening. We at **Botanicare** are proud to offer the highest quality in components and plastics to ensure years of successful gardening in the most innovative system ever.

For product support, call your retailer or contact **Botanicare, toll free, 1-877-753-0404**. Check out our website at [www.botanicare.net](http://www.botanicare.net) for a complete list of outstanding products, including the latest in international systems, plastics and plant nutrients.



## Cloning Instructions

- 1 Fill a clean open container with fresh water.
- 2 Take 2 - 4 inch long cuttings off the preferred stock plant. Remove larger leaves, in order to reduce transpiration.
- 3 Submerge a single cutting into the container of fresh water. With a clean, sterile blade, re-cut the bottom of the cutting at a 45 -degree angle under water to prevent air embolisms.
- 4 Slightly scrape the epidermis of the sidewall of the cutting stem. This will allow the rooting hormones to penetrate the vascular system to enhance root initiation.
- 5 Place the clone into a neoprene insert and position in the tray. Repeat for each clone site.
- 6 Place clone machine 1 - 2 feet below fluorescent lighting.  
**NOTE:** You will want to have the light on between 16 - 18 hours per day.
- 7 Fill the reservoir with purified water.
- 8 Add one ounce of Power Clone Solution™ per gallon of water, or substitute alternative Cloning Solution as recommended per label.
- 9 Add 2 - 5 ml of AquaShield™ per gallon of water.
- 10 Adjust pH level to 5.8 - 6.2
- 11 Place the Humidome™ on top of the tray if applicable.
- 12 Maintain cloning solution temperature at 72 - 77 degrees Fahrenheit.
- 13 Run clone machine continuously, 24 hours a day.
- 14 Clones will root in approximately 3 - 10 days.
- 15 When roots begin to emerge, add 15ml. of Power Flower™ or preferred bloom formula plant food per gallon of water to aid in root development.
- 16 Solution should not need to be changed before the cuttings root.
- 17 Transplant the rooted cuttings into pots, planters, soil or hydrogardens.

