

# Back Stacked Fountain Assembly

A back stacked fountain usually has 3-5 pieces. Sometimes the pedestal or the pump housing will be part of the bottom bowl, some times a separate piece. The one thing they all share is the electrical cord for the pump exits the rear of the bottom bowl.

## Getting Started

**Electrical Requirements:** Most fountain pumps require a minimal electrical supply of less than 1 amp/120 volt. However, because of its use underwater, a (GFC) ground fault circuit is recommended and required by law in most areas. At the very least, a grounded outlet should be used for power to the pump within two to three feet of the fountain base pedestal.

**Foundation Requirements:** The larger your fountain the sturdier the foundation needs to be. If you are able to install the fountain on a level concrete slab, blacktop, or concrete pavers, you should have no problems with your foundation. If your location is on soil or grass, David's Patio recommends one round or four square concrete stepping stones to pave an area 50% larger than the base of the bottom pedestal. This will insure no shifting of your fountain when the ground gets wet or soft.

## Tools & Supplies Needed

Carpenter's Level or Water

Window Caulking (Similar to clay or silly putty - soft and will not harden)

Clear plastic poly tubing - 1/2" I.D or 3/8" I.D.

On some taller fountains - tape measure or ruler

Clear silicone

Plastic Wedges (wobble wedges)

Knife or scissors

## Precautions

**Concrete Is Heavy:** Most fountains require more than two hands to assemble. Because of this, we recommend inviting a friend or two for assembling your new fountain.

**Concrete Is Fragile:** As hard as a rock, concrete will withstand thousands of pounds of pressure, but one blow with a hammer or lawn mower will do permanent damage. When stacking pieces or setting them down on concrete patios or driveways, do it very carefully; even pad them if you can.



**Concrete Will Freeze:** Special bio-friendly chemicals were used to make your fountain as impervious to water freezing as possible. Painted, or sealed, never assume your fountain is waterproof. Before freezing temperatures arrive, fountains should be electrically disconnected and drained. Sometimes covering the fountain or disassembling and storing the bowls upside down is highly recommended. Remember frozen water expands, and a frozen fountain and pump are not any more fun than the pot hole in the road.

## Assembly Hints

1. Different types of levels can be used when leveling fountain bowls. If your carpenter's level is too short, set it across the spills on a straight rod. A line leveler can be used by stretching a string across the bowl spills. If you don't own a level, don't go out and buy one; a garden hose and a bucket of water will do even better.
2. Tubing can very easily kink during assembly. After assembling each fountain level, blow through the tubing to the pump. If the air won't go down, the water can't come up. This check could save you backing up one or more steps.
3. Caulk around tubing going through bowls and under bowls on contact surfaces.

## Assembly Instructions

1. If your fountain has a separate pedestal, place it gently on the prepared foundation surface.
2. Next, place the bottom bowl on the pedestal and visually check for levelness from a distance.
3. The pump will always be located in the bottom bowl; place the pump into position. If there are additional bowls, stack them as necessary to their complete height. If there is a separate pump housing, put in place over the pump.
4. Measure the distance from the pump outlet to the surface of the bowl opening or pump house top surface. This will be the necessary length of the tubing from the bottom of the fountain top to the pump connection.
5. Adjusting the tubing length can be done in different ways.
  - A. If the fountain top has the same size tubing as the pump requires and the distance is short, the tubing can be easily pulled through the fountain top from the bottom to the required length and easily attached to the pump. **Be careful not to pull the tubing completely out as it is rather hard to reinsert.**
  - B. If the tubing will not pull or is too short, it can be easily extended by using larger or smaller tubing. Most of the pumps required have a 1/2" ID fitting. If the fountain top has the same size tubing, a 2" piece of 3/8" tubing can easily be used as a coupling splice by applying a little moisture to the smaller piece and inserting it into the larger tubing. If the fountain top and pump have opposite hose size, use the opposite size hoses and insert one into the other; they will naturally form a water tight seal and stay connected.
  - C. Gently set the fountain top into place. This sometimes takes 2 people to do without damaging the fountain. Make sure the pump is sitting as low as possible in the bowl and that the hose is not kinked.
6. Fill the fountain as much as possible and plug in the pump. As the upper levels fill, it may be necessary to add more water.
7. If the water spills from the rear of the fountain or the bowl spills do not act properly, it may be necessary to tilt the fountain forward. This is usually best done by adjusting the fountain or shimming the bottom pedestal or between the pedestal and bottom bowl using plastic wedges provided by your fountain supplier or hardware store.

#### Trouble Shooting

No Water Pressure: Kinked Hose	Reassemble Fountain
Dirty Pump Filter	Clean pump
Faulty Pump	Requires new pump
Bubbles or Foam: Low Water Level	Add water
Organic Contaminant	Drain and refill
Water Disappears: Spillage/Splatter	Slow down water flow
Wind	Turn off fountain (timer)
Evaporation	Refill fountain
Leaks at Power Cord	Seal w/waterproof sealer
Capillary action	Tilt fountain top bowl forward