

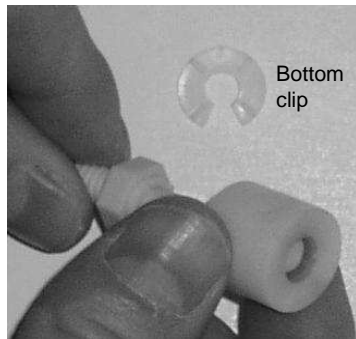
This do-it-yourself project involves household 120 volt electricity, which, if mishandled can cause shock or death by electrocution. If you are not comfortable working with electricity, do not assemble this kit. Proceed at your own risk.

Using optional parts included in your kit to prevent your reservoir pump from running dry

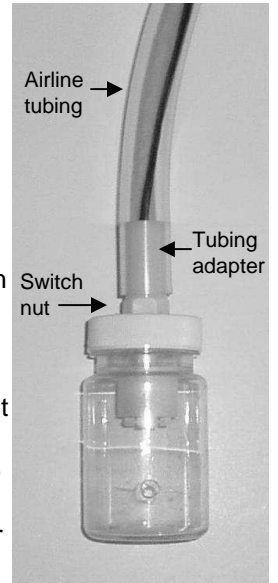
Your Top-it-Off Kit Deluxe includes an extra i-float float switch and an i-float tubing adapter to allow you to create a reservoir-low shutoff. Some pumps will fail if they turn on when they are not submerged in water. This kit supplement will use the third float switch in the bottom of your reservoir to prevent your pump from running when the water level in your reservoir is below the point where you place the switch.

1. Follow steps 2a and 2b of the main instructions to prepare your second slosh & snail guard. You will need to purchase some 1/2" inside diameter tubing to insulate the float switch wires from the water in your reservoir. The epoxy in the top of the float switch provides basic insulation, but is not designed to be submerged in water for extended periods, so make sure that the tubing is long enough to extend above the high water level in your reservoir.

- 1a Remove the bottom clip on your third float switch, remove the float, turn the float upside down, replace it on the stem and replace the clip. This changes the operation of the float switch so that its wires will complete a circuit when the float is up instead of down (the other two switches in your system will complete a circuit when their floats are down).



- 1b Remove the washer included with the switch (if any) and discard. Mount the float switch in the slosh guard and tighten securely. Thread wires through the i-float tubing adapter with the threaded end of the adapter down. Screw the adapter onto the top of the switch stem. Thread wires through 1/2" tubing and fit tubing onto adapter, trimming it so that its length is greater than the depth of your reservoir. Use silicon sealant in the end of the tubing and at other connections. Allow silicon to dry and test to make sure that water cannot get to the top of your switch.



2. Wire the third float switch into the float switch assembly following Step 3 of the main instructions and adding it as shown below. Place the reservoir switch in the bottom of your reservoir. Keep the top of the tubing above the high-water level.

Tubing should not actually come this far. Shown only to identify wires from the switch that will be placed in your reservoir.



Follow directions in 3a-3c of main instructions on attaching crimp caps.

Notes:

Important: observe conditions in your reservoir to make sure that condensation does not form inside the tubing. Exposing the epoxy sealant in the top of the switch to condensation can cause premature switch failure.

You can use your extra Mold-a-Holder to secure the top of the tubing to the top of your reservoir.

Make sure that the top of the slosh & snail guard is vented so that water can completely fill the guard and no air pockets form.

Test placement of the switch to be sure that its float falls and shuts off the system at a level where the pump is still submerged.

Test the system periodically by pushing the float down (put a toothpick or other prong through one of the vents on the top of the slosh guard) and checking that it shuts down your system.

Remember to clean all of your float switches periodically with a soft cloth.