The Tap Up - a two bucket hand sink

This hand sink is a simple option for food prep, eating, and first aid areas, as well as around restrooms. This bucket system is easy to fill and empty, and can be made with any two similarly sized buckets. We recommend coupling this sink with a foaming soap dispenser. Foam does not require water to lather up, generating significant water savings.

Materials

- 1" bouncy ball
- 1" PVC threaded adapter
- 1" threaded PVC endcap
- 1/4" x 6" brass toilet float rod or screw stock
- 1/4" vinyl rod cap
- Teflon tape
- a rubber glove
- 8 ft rope (50lb test)
- Cut finger of glove
- 1" inner dia. rubber gasket
- Label all wash water buckets.

Two matching buckets, one with a handle, and one lid.

Full buckets can be heavy. A 5 gallon bucket of water weighs 45 lbs when full. Choose buckets that you can handle, and don’t fill buckets beyond the strength of their attachment point.

Filling & Emptying

Clean water goes in top. Be safe, pour only what you can lift!

Tip and pour out the bottom bucket.

Designate an area to empty your wash water and label it. Choose somewhere near the root zone of a tree or bushes. Avoid waterways, including drains. Seek a place unlikely to be exposed to yourself, the public, pets, and kids.

Label your wash water bucket so it is not confused with a potable water container.

Walk and pour. Water splashed on leaves can hurt plants.

Tap Up Designed by Mathew Lippincott, 2011, released by CERN Open Hardware License.
Assembling the Tap Up

Tools needed:
- drill & bits:
  - 1/16"
  - 1/4"
  - 1"
- scissors

1/16" bit is for the water holes, 1/4" is to allow the tap rod through, and 1" cuts into the bucket.

Drill a 1" hole in the bottom center of the bucket. Go slow and keep the drill level.

Hold PVC end cap in a clamp or wear gloves to protect your hands. Drill eight 1/16" holes for the water. Angle the drill out away from the middle of the cap.

Drill a 1/4" hole in the middle, straight down.

OPTIONAL: cut bouncy ball in half with a knife to make it easier to drill. Cut along the ball's seam.

Drill a 1/4" hole in center of the bouncy ball.

Screw the 6" long 1/4" toilet float rod or 1/4" screw stock into the bouncy ball.

Wrap Teflon tape around the 1" PVC threaded adapter.

Stick 1" inner dia. rubber gasket around 1" PVC threaded adapter.

Screw 1" PVC threaded adapter through and out the bottom of the bucket.

Screw 1" PVC end cap onto threaded adaptor. Tighten against the bottom of the bucket.

Cut the finger off of a disposable glove to make the top gasket.

Pull cut glove over the top of the 1" PVC threaded adaptor so that it leaves an opening around the rod.

Put bouncy ball with toilet float valve screwed into it through the 1" PVC threaded adaptor.

attach 1/4" vinyl rod cap onto the end of toilet float rod.

Run rope through the handle attachment hole on the lower bucket without the valve

Run rope through the handle of the upper bucket (with valve) and tie off. Repeat on other side.

excerpt from A Sewer Catastrophe Companion for more info see www.cloacina.org