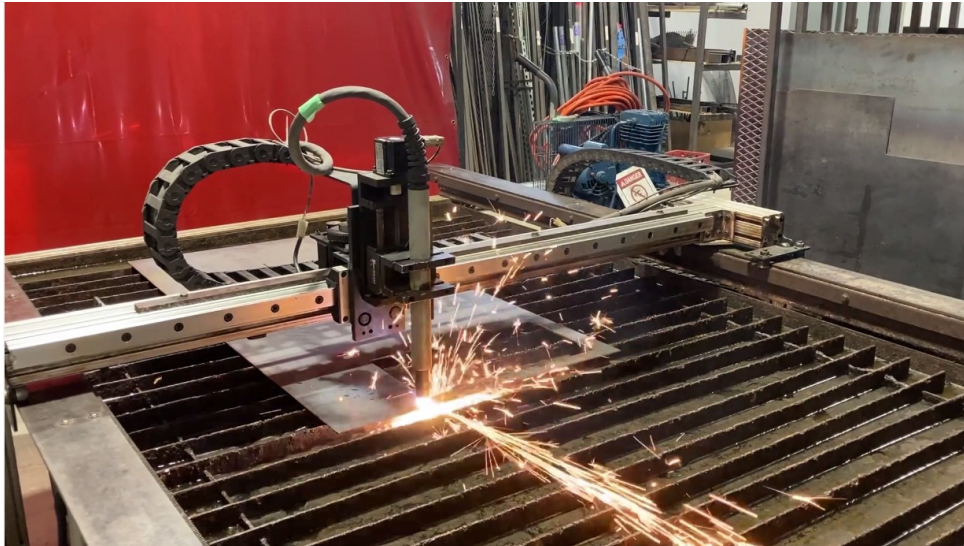


Topping Off the Water Tank

Introduction

The CNC plasma cutter at Artisans Asylum has a work table with a grate and a tank of water to catch the sparks. It is visible in the picture below. The metal slats hold the workpiece level at the correct height. Please see another document to see how to planarize this surface. Below the level of the grate, the water catches the sparks, extinguishes them, and precipitates out heavy metal residue as solid waste. Additionally, the water forms part of the grounding path for current from the torch.



In this picture, the water level is very low. In fact, the water level should be as high as it can practically be. Water evaporates steadily out of the tank, and so every week or two it needs to be topped off. This document tells a convenient way to do it quickly and quietly.

What You Will Need

There is a metal-clad hose normally stored in the bottom of the black tool cabinet by the machine. You will also need a wrench or vise-grip.

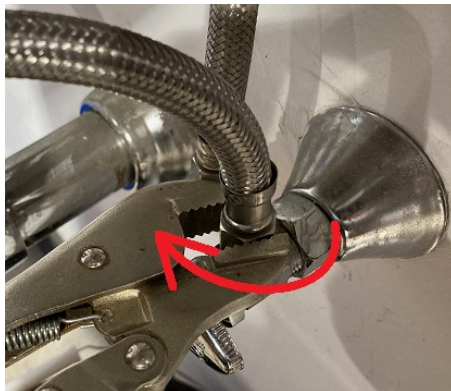


Hook Up The Hose

Go to the sink next to the machine and turn off the cold-water hookup valve under the sink, on the right. Remove the nut from the valve with the wrench.

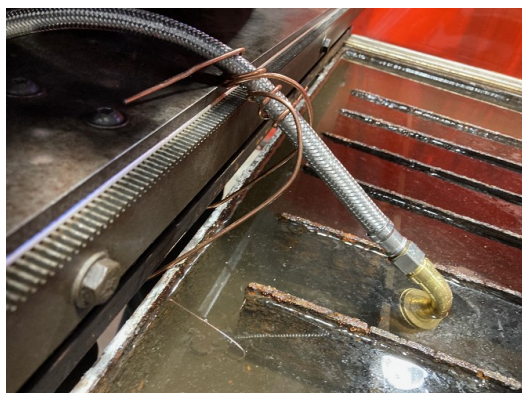


Attach the nut on the hose to this valve, and tighten gently with a wrench.



Attach the Hose to the Tank

Hook the wire loop under the beam to hold the hose securely. Put the end of the hose under water to reduce splashing.





Run the Water

Turn on the water valve, and top up the tank. The corner of the tank nearest the hose is the lowest point. Fill it up to about $\frac{1}{4}$ " below the top edge.



Put Everything Away

Shut off the water flow, detach the hose, drain it, and replace the hookup hose to the sink. Don't forget to turn the water back on. Return the water hose to the tool cabinet.

Note on Electrolyte

If the water level has declined through evaporation, you don't need to add electrolyte.

