



## Intro: Drying Rack for Glasses and Silverware

When I wash dishes, I hang them up to dry where they are stored -- on drying racks. That minimizes clutter on the counter, and saves me time putting things away when they are dry.

This rack is made of PVC pipe and stainless steel welding rod. Holes that are a little tight are drilled in the pipe and the welding rod posts are hammered into the holes like nails. The glasses rest upside-down on the tips of the vertical posts.

The silverware has holes drilled into the handles so that I can hang them from hooks under the lowest row of glasses.

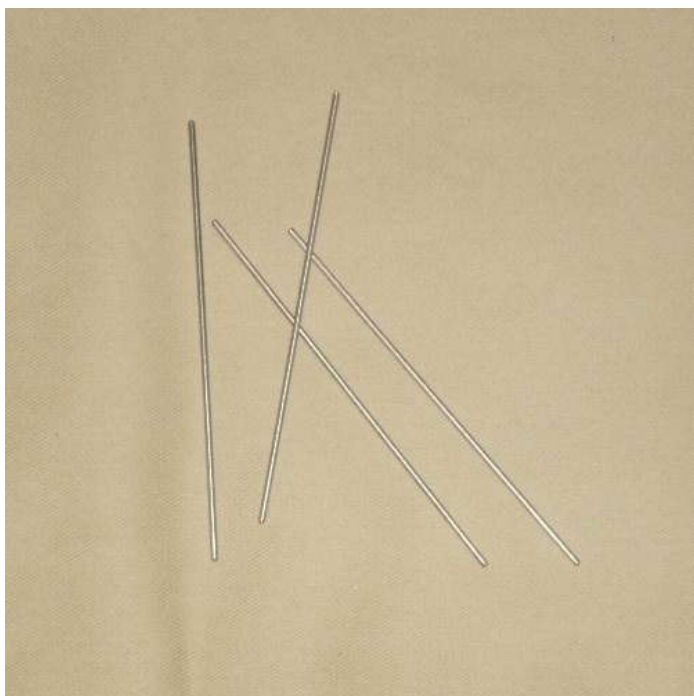


### Image Notes

1. The hooks hang onto a horizontal piece of rebar, or a pipe. The whole drying rack can be easily removed by unhooking it from the rebar.

### step 1: Stainless Steel Posts

The posts are cut 6 inches long and set 3 inches apart. I use 3/16 inch diameter welding rod.



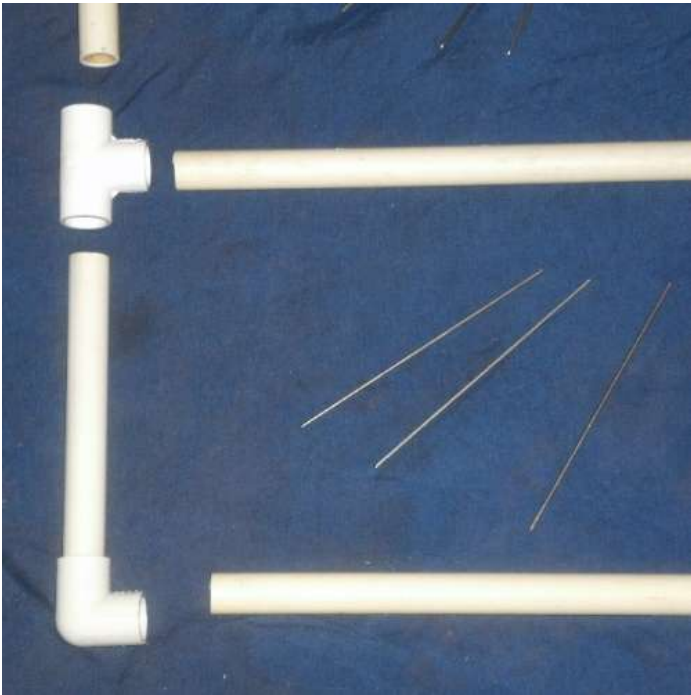
### step 2: Layout

You can vary the width of the rack according to your space available. I have one rack 43 inches wide, and another 22 inches wide. This is the 22 inch wide one and has three tiers of glasses.

The side pieces that separate the horizontal pipes are 7 inches long. In this case the top side pieces are heated and bent to make hooks that grab onto a piece of horizontal rebar. You probably won't have exposed pipes, or rebar to hang things from. If you make a rack, you will have to adapt the hanging system to your situation, mounting it with screws, etc.

Here, you can see the parts laid out. Standard PVC "T's" and "elbows" are used to join the pieces using transparent PVC cement. The transparent cement looks nicer than does the blue cement that is also available at hardware stores.





### step 3: Safety while Heating PVC

We love plastics for what they do for us, but plastic manufacture and decay tend to pollute the environment and negatively affect our health.

Vinyl Chloride, one of the components of PVC, is carcinogenic. When it is locked up in the polymer, however, it is much safer to be around. In my years of experience working with PVC, I have not noticed any adverse effects on my health from being around it.

Always work in areas with good ventilation. If you do get caught in a cloud of smoke, hold your breath and move to clean air.

When heating PVC with a gas stove or propane torch, try not to let it burn. Smoke from burning PVC is bad. With experience one burns it less and less. Don't panic the first time you do burn some. It scorches, but doesn't immediately burst into flame. Move the material away from the flame and try again. Don't breathe the smoke. Smoke avoidance comes naturally for most people.

While heating PVC over a gas flame, keep the plastic an appropriate distance from the flame to avoid scorching the surface before the inside can warm up. It takes time for heat to travel to the center of the material being heated.

Keep the plastic moving, and keep an eye on the state of the plastic. When heated, the PVC material is flexible, like leather. Beyond this stage, you risk scorching it.

A word from James, the plastic engineer -- "Just a word of warning, PVC can handle some high heats but if it catches fire, you wont be able to put it out, it does not need oxygen to burn so don't do this inside".

I do work inside, but my house is made of cement and has good ventilation. MAKE SURE THAT YOU HAVE GOOD VENTILATION. PLAY WITH FIRE -- CAREFULLY.



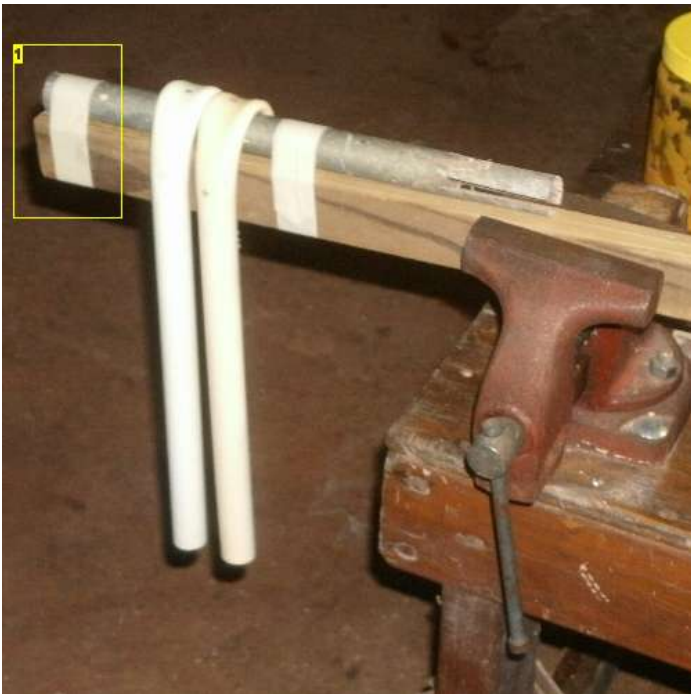


#### step 4: Bending the PVC Hooks

These pipe sections were cut about 10 or 12 inches long. About 4 inches at one end were heated over a gas stove to soften the plastic, and bent over a pipe and wood unit taped together and held in a vise.

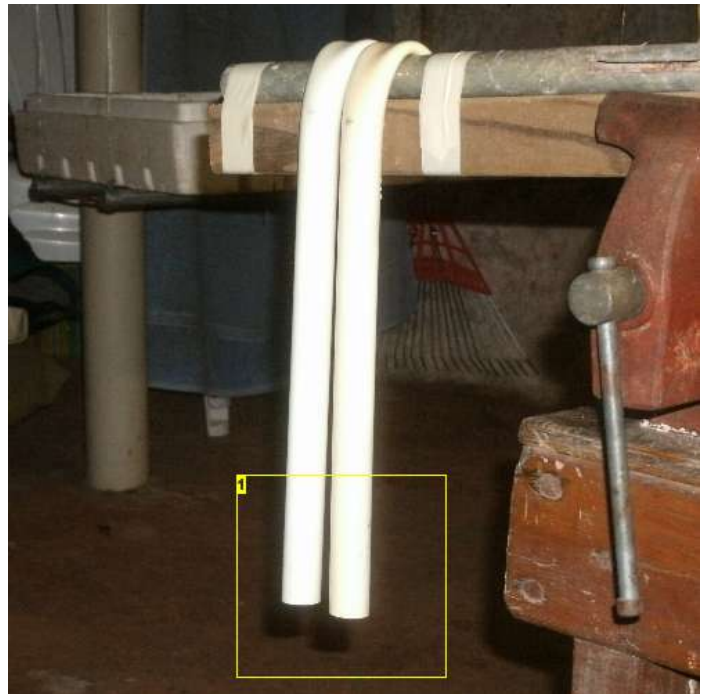
Use a rag to protect your hands from the hot pipe when you bend it. After it is bent, just hold it until it cools and rigidifies again.

It is good to make the hook pipes a little long so that you can trim the straight ends to get the lengths even after the hooks are bent.



##### Image Notes

1. Pipe and wood bending jig is taped together with masking tape and held in a vise.



##### Image Notes

1. Pipes cut to same length after the hooks are bent.

### step 5: Hanging the Silverware

I drill holes in the handles of all my silverware so that I can hang it up for drying. The hooks are made out of the same 3/16 inch stainless steel welding rod that is used for the glass drying posts. You can hang several utensils on each hook. It's a great way to keep them organized and handy.



## Related Instructables



**Wash Dishes By Hand** by pluralmolecule



**Free Hanging Glass Rack** by Polemic



**Incredibly Easy Pasta Drying Rack** by tznz



**DIY Kitchen Pot Rack** by ClayOgre



**Decorative Bamboo Clothes Drying Rack** by greggg



**Plastic Wine Rack** by filmantis



**Bulk Priming Home Brew - Made Easy** by GasherMan



**Best Solar Oven** by ben1122