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Project: Two Stepper

Overview: It sure is a pain trying to reach the top shelves of kitchen or pantry cabinets. Instead of storing a fold up ladder in a already full closet, why not add a decorative step stool to your home décor. This two step stool allows you to reach the top shelf.

Materials: Red Oak

Minimum Cutting Area: 38"x42"

Bit Size: 1/4"

Finishing: Watco Danish Oil is a great stain to use to bring out the color in the oak. Then cover with Minwax WipeOn Polyurethane.

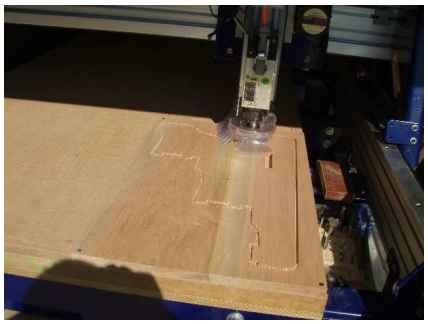
Always read the entire project details before starting to cut the file yourself
Account for the thickness of the physical material on hand and the material thickness in the file
This file is zeroed to the tables surface, Zero your bit to the tables surface

Depending on the machine you are cutting this file with, you will need to account for a hold down method. If using screws, simply reference the area where the cutting does not take place and add screws for hold down.

As the file starts cutting the profile of the parts make sure the cut is going all the way through the work piece and into the table surface. If you need to adjust any part of the file make sure you do not remove the hold down or you will loose position.

Once the file is complete, flip the work piece over and cut the tabs with a utility knife. If you try to push them out by hand it could lead to tearing out on the wood and take away from the projects appearance.

Keep in mind when selecting your wood that the face that is against the table is the actual grain you will see, what you are cutting on will actually be the bottom of the steps.



The same applies with cutting the sides, the face that is down (against the table) is what will be the outside of the stool, the face that is up is what will go towards the inside of the stool.

A 1/4" round over bit looks good and helps from stubbing toes. Put this all the way around one edge on both steps and the handle. Route both edges of the handle grip.

Thoroughly sand all of the pieces before starting the finishing process. I will make for a better finish. This project is finished before it is assembled.

Two coats are recommended to really soak in and bring out the color of the grain. After this apply two coats of Minwax WipeOn Poly or use a polyure-

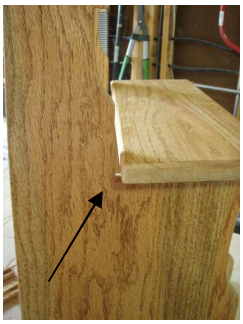
Apply a good amount of glue to the mortises that are on the step sides. Wipe the glue around in their with your finger or a small brush. Do not glue the actual steps or handle at this point.

Wipe any glue squeeze outs or runs off from your project. These can drop out for at least 30 minutes after you have glued up, that is why this project is glued in different parts.

The arrow points to the piece that is actually being glued at this point. Push one of the steps into place with NO glue, this is simply making sure the support piece is installed properly. Allow this to setup for 30 minutes.

Fill the step mortises with glue and spread the glue around like before. Push both steps into place and check to see if the gap is right from the step to the side piece.

This is how your project should look behind each step. Use a rubber mallet to push the joint all the way together.



If you have a gap behind your step simply rotate it 180 degrees so it looks like the picture in the previous step.

Use the rubber mallet to tighten up all of the joints. Flip the stool upside down like pictured above to keep glue from dripping out of the joints. Let this sit for at least 30 minutes.

Apply glue to the handle mortises like done before, push the handle into place and use a rubber mallet to snug together.

Rotate the stool like pictured above and put a couple clamps to hold this together. This strengthens the joint and keeps the glue from running out.

Keep an eye out for glue drips and wipe them off with a damp towel. Make sure all joints get pressed together snug to ensure proper strength of this stool. Try cutting out of plywood and giving this project a personalized paint job.

Two Stepper PartWorks
Two Stepper Toolpath