-RAKO STUDIOS-

Butcher-block workbench

A solid workbench with a butcher-blog top sitting on two Craftsman ball-bearing drawer tool boxes.



A man hopefully arrives at a certain station in life where he demands the best. Not in everything, but certainly the best in his tools. Having 6 Harley Sportsters and building prototype projects I wanted a really nice workbench. Apparently no one makes one, so I built my own. I ordered a 24"x60"x1.5" solid maple butcher- block top from Blockhead Blocktops in Michigan. The owner is a great guy with his own electric power plant to burn the chips. I used Tung Oil to seal the top.

For the cabinets I used two Craftsman ball-bearing GripLatch tool boxes. I connected them together with two square aluminum tubs I cut up from stock at Home Depot. I routed grooves in the bottom of the maple top to accept the metal flanges on the top of the toolboxes. I was going to screw the top on from underneath, but it was so solid when I plopped the top on, I just let the weight keep things secure. The top came with a Masonite sheet protector, which I put on top to protect it.



This is the cheap Craftsman workbench I replaced. It was about 20 years old.



I used Home Depot aluminum tubing to connect the two toolboxes together at the base.



The casters on the old workbench reveal how lightweight and cheap it is.



Drill the tubing in a press to keep the holes square. The bolts have to line up.



The new workbench has casters that can take a lot of weight. They roll much easier as well.



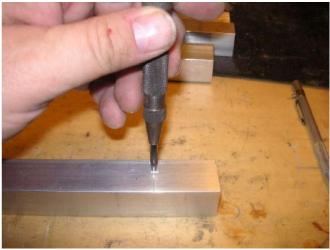
Make the ends and holes all line up. I am building two workbenches, so four tubes.



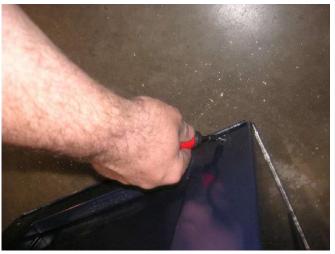
The other end of the tubes scribed square.



Now enlarge the hole for the 5/16th bolts.



Center punch for the hole to get it exact.



Deburr the holes so you don't get cut. Its the pro way to do things and shows craftsmanship.



The holes are still smaller diameter pilot holes. Use them to drill pilot holes in the toolboxes. It would have been smarter to clamp the tube to the box, but I was in a hurry.



A Scotchbrite pad put a nice satin finish on the aluminum tubes. The Bosch drill had its charger fail and it got tossed soon after this project.



The 5/16th bolt slips in at a strong structural place in the toolbox frame.



The tubes space the casters apart so the don't clang into one another as you roll it around.



The tube slip on, especially if the holes are a bit oversize. I go 1/32nd over, or 11/32 drill.



The gap also serves as a handy place to store flat material and sheet stock.



A flat-washer under the bolt and the nut spreads the load. Use a lock-washer to keep things tight.



Now you can mill slots in the underside of the top to fit the toolboxes.



The slots had to be too precise to just wing it. So I made the drawing where I could get the slots in the exact place.



Here's a view of the slots that fit to the toolbox.



I used a large aluminum extrusion as a solid straight-edge for the router. It was easy to get it right working off the drawing.



A CRaftsman router for Craftsman toolboxes. I hate this thing, the goofy rotary clamp keeps slipping and the bit goes too deep or shallow.



Routing the slots, I gave this router away and now have a DeWalt and Milwaukee brands.



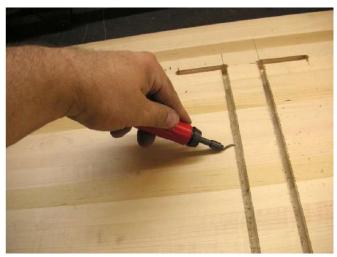
I used a screw to locate on long runs.



I drilled those two holes but it turns out the weight of the top and its slots keep it in place.



Here is the whole top. Note bottom drawers still out where I bolted the two boxes together.



A metal deburring tool worked fine on the slots. Maple is a nice hard wood.



The second workbench all finished with the first one in the background.



Here are the slots for one half of the top. Its a bit of work but not bad with a drawing to help.



The handle goes on the side with the swivel caster. I bought an extra set of swivel casters to replace the straight ones on this box. You can't have straight casters in the middle.



One nice thing about getting the forst workbench built is that you can use it to build the second workbench.



The square helped with the layout. The caliper set teh depth of the router bit.



Ab armature lathe provided a counter-balance.



I deburred the holes despite deciding to not screw the top down. Its weight keeps it put.



Another shot of the finished second top.



A flash picture gives a little more detail. As you would expect, sawdust goes everywhere. It is so nice when the top just plops down on the boxes.