Knockoff Plow & Hearth Stool Plan

Supplies

(1) 2x2x8

(1) 2X4X8

(1) 1X4X6

1-1/4" pocket screws

2-1/2" pocket screws

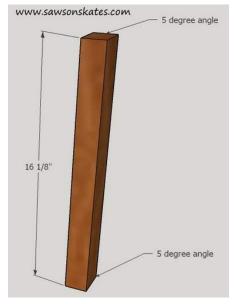
Scrap pieces of 1/4" plywood or MDF

Tools

Compound Miter Saw Kreg Jig Drill Jig Saw 1" Forstner Bit Jig saw or chisel



Step 1. Cut Legs. Set miter saw table to 5 degrees. Set miter saw bevel to 5 degrees. Cut first angle on 2×2. Leave piece on the saw. Measure from the miter you just cut, along the top of the piece and make a mark at 16-1/8". Slide the piece, so the mark corresponds with the saw blade. Place a stop at the end of the piece, so you can cut the other three legs to the same length. Make your cut and repeat for the other three legs.



1a. Set miter saw table to 5 degrees.



1b. Set miter saw bevel to 5 degrees.



1c. Cut first angle on 2×2.



1d. Leave piece on the saw.



1e. Measure along the top from the miter you just cut.



Step 1 continued...

1f. Make a mark at 16-1/8".



1g. Slide the piece, so the mark corresponds with the saw blade.



1h. Place a stop at the end of the piece, so you can cut the other 3 legs to the same length.



1i. Make your cut and repeat for the other three legs.



Step 2. Cut the Long Sides. Cut 2 pieces of 1×4 to 11", then cut a 5 degree angle on each end. Drill pocket holes in each end and two pocket holes in the top (shorter side). These pocket holes will be used to attach the top in Step 10.



Step 3. Cut the Short Sides. Cut 2 pieces of 1×4 to 6-9/16", then cut a 5 degree angle on each end. Drill pocket holes in each end and one pocket hole in the top (shorter side). These pocket holes will be used to attach the top in Step 10.



Note: It's a good idea to sand all of the parts you have cut so far, before you start assembling.

Step 4. Orient the Legs. Set up the legs as they should look when attached to the stool. In other words, the legs should splay out at the bottom and the top of the legs should be parallel to the workbench. Take the legs that are farthest away from you and lay them on the table, so the top of the legs face away from you. Lay the legs closest to you, so the top of the legs are facing you. Now the bottoms of the legs should be facing each other.







Step 5. Attach Short Sides. With the top of the legs still facing you, put two pieces of scrap 1/4" material on the workbench in between the legs. This scrap will set the side in 1/4". Apply glue to each end of a Short Side, place between legs (so the short edge is facing towards you) on top of the scrap, clamp to the legs and attach using 1-1/4" pocket screws. Repeat with the other set of legs and Short Side.







Step 6. Attach Long Sides. With the top of the legs facing you, put two pieces of scrap 1/4" material on the workbench in between the legs. Apply glue to each end of a Long Side, place between legs (so the short edge is facing towards you) on top of the scrap, clamp to the legs and attach using 1-1/4" pocket screws. Repeat for the other Long Side.



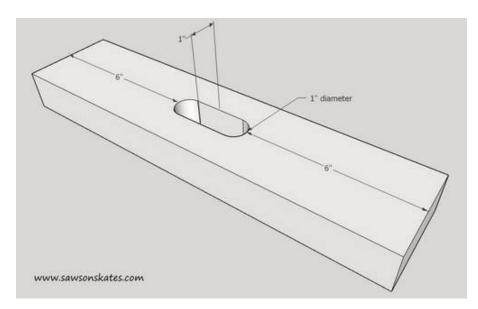


Step 7. Cut the Top pieces. Cut 3 pieces of 2×4 to 15". On 2 pieces, mark 1/2" on 2 corners and cut a 45 degree angle.





Step 8. Make the handle. On the third top piece (the one without the angles), layout the handle. Using 1" Forstner Bit, drill each end of the handle. Using a jig saw remove the area between the two holes. I opted to use a chisel to remove this material.







Note: It's a good idea to sand all of the parts now, before you start assembling. I would also recommend rounding over the cut edges to match the edge contour of the 2×4

Step 9. Assemble the top. The top pieces are 1-1/2" thick, so be sure to adjust your Kreg Jig for this extra thickness. I set my jig to 1-3/8" because I didn't want to take the chance of the pocket hole being drilled through the side of the top.

Set the top pieces on your workbench and temporarily center the legs on the top pieces – do not attach. Mark the locations for pocket holes to be drilled in the top pieces making sure to avoid areas where you drilled pocket holes in the side pieces – these pocket holes were drilled in Step 2 and Step 3 and will attach the sides to the top. Also, avoid drilling pocket holes through the handle. Once you have marked the locations, drill pocket holes, apply glue, clamp and attach using 2-1/2" pocket screws.







Step 10. Attach top to legs. Place the top on your workbench, so you are looking at the bottom. Center legs on the top, clamp and attach using 1-1/4" pocket screws.





Finish

To finish this piece I first applied a coat of Sherwin Williams "Oak Mantle" stain to give it golden glow. Then I applied a coat of Rustoleum "Kona" to darken it up. I finished it with three coats of Bob's Miracle Finish.

