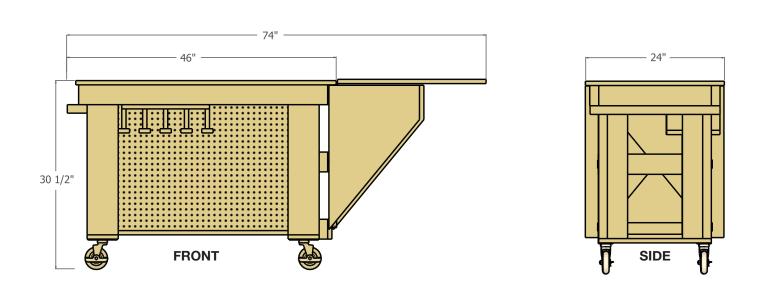


# Workbench

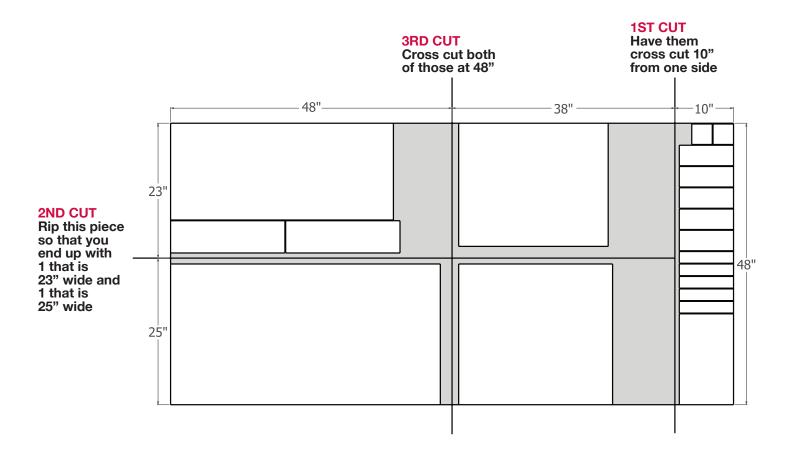
If you are tight on space but large on ideas this bench is just what you need. Sturdy and mobile this bench has an ingenious fold out wing that gives you over four square feet of additional workspace when you need it.



## LARGE PLYWOOD CUTTING GUIDE

Most stores that sell plywood offer you the ability to have large sheets of plywood roughly cut down to smaller, more manageable sizes. Here is a simple diagram to take with you that will help you instruct them to cut your sheet of plywood.

When you get home pay special attention to what sections yield your bench pieces.

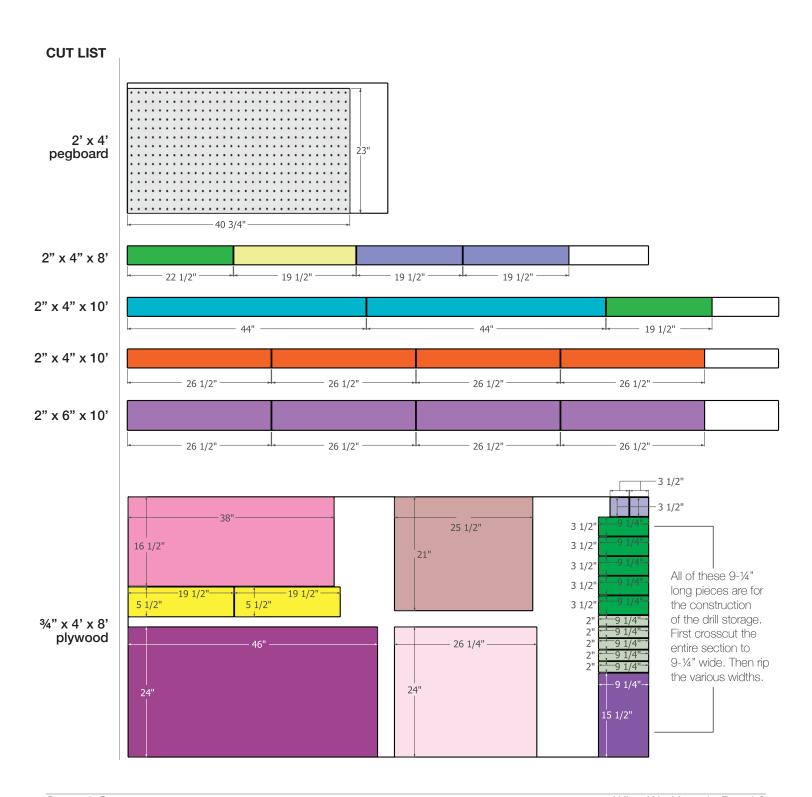


Make sure you read through the instructions carefully prior to making any cuts.

Take notice of any special construction notes.

VERY IMPORTANT - most all the material after the leg and frame assemblies are to be cut to fit. Please do not cut any boards prior.

And always practice safe DIY'ing. Have fun!



## **MATERIALS LIST**

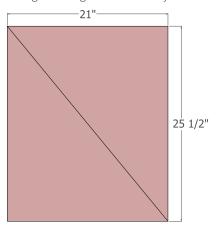
Material	Qty
34" X 4' X 8' plywood	1
2" x 6" x 10' pine board	1
2" x 4" x 10' pine board	2
2" x 4" x 8' pine board	1
2' x 4' peg board	1
4 locking casters	4

Material	Qty
1-1/4" pocket screws	
2-1/2" pocket screws	
2-1/2" spax screws	
#14 x ¾" self drilling hex head screws	
1-1/4" brad nails	
34" staples	
wood glue	

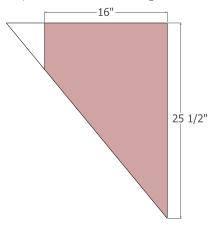
## **NOTES**

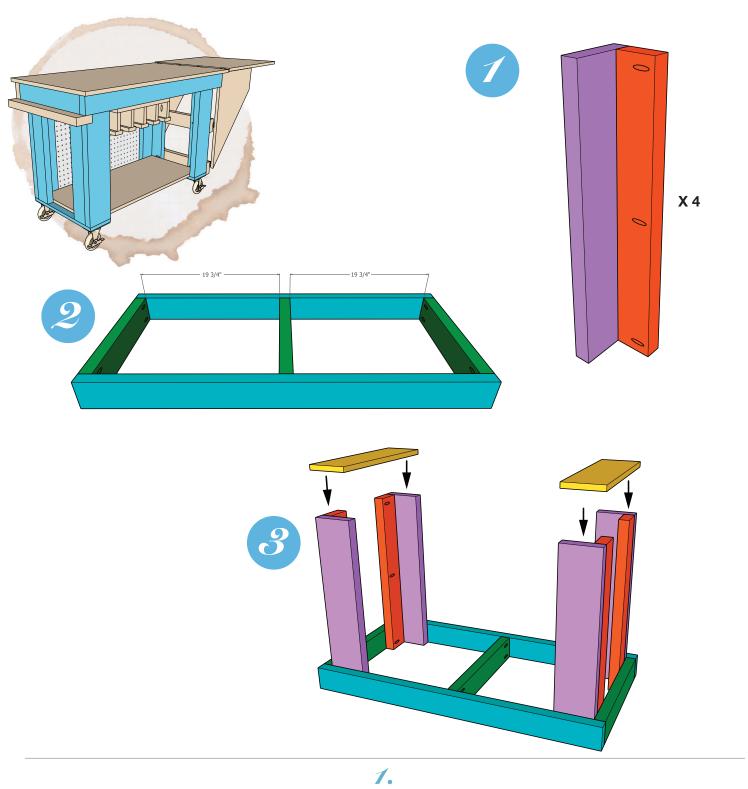
# **CUTTING THE WINGS**

Start with a rectangle piece of plywood cut to these dimensions. Draw a diagonal line as shown and, using a jigsaw, carefully cut along the diagonal. This will yield both your wings.



Now measure over 16" and using a speed square mark a line as shown. Using a jigsaw or miter saw remove the corner. Repeat with the other wing.





Begin by making the four leg assemblies. Attach the 2" x 6" and 2" x 4" pieces as shown. Drill for  $2-\frac{1}{2}$ " pocket screws in the 2" x 4" and attach with wood glue and screws. Repeat this for the other three leg assembliess.



Next assemble the top frame. Layout your 2" x 4" pieces as shown. The middle brace is centered. Drill for 2-1/2" pocket screws and attach using wood glue and screws.



Attach the four leg assemblies to the frame as shown using wood glue and 2-1/2" spax screws. Screw from the inside of the legs out into the frame.

Attach the 19-½" long plywood feet to the bottom of the legs with wood glue and 1-¼" brad nails.





Attach the casters so that they are flush with the outside edge of the plywood feet. .



Now you will attach the 2" x 4" support braces for the fold out wings, as well as, the 3-½" square plywood spacer blocks. The spacer blocks set the right wing our far enough so that it can close over the other.

First attach the 2" x 4" braces with wood glue and 2-1/2" spax screws. Make sure the bottom one is flush with the bottom edge of the plywood feet. The second one is centered.

Then you can attach the three plywood spacer blocks with 1-¼" brad nails and wood glue. The top spacer block attaches flush to the top edge of the top frame and flush to the inside edge of the long apron 2" x 4" of the top frame.

The other two are flush to the outside edge of the braces you just attached.



Now you can attach your top and bottom shelf with  $1-\frac{1}{4}$ " brad nails and glue. The top overhangs the wing side by  $1-\frac{1}{2}$ ". All other sides overhang  $\frac{3}{4}$ ".



7.

Time to attach the hinges. You may find it easier to tilt the bench on one end so that the wing side is up. The tricky part is attaching them so that the round hinge pin area is set over the edge. The wing hinges should have the pin to the outside while the top extension hinges should have the pin over the bottom edge of the top. Drill pilot holes for each screw.

The top four wing hinges are centered on their respective boards. The bottom two are flush with the top edges.

The outer two top extension hinges are inset 1" from either side and the inner two are centered from there.



Refer to the notes page for directions on cutting out your two wings.

To attach the wings to the hinges start with the wing on the left. It won't quite be flush with the top because you have to allow clearance of the top extension hinges. Before actually attaching the wing hold the hinge plate to the edge of the wing with you fingers and rotate the wing as if it were attached. The wing should just close inside the spacer blocks you attached in Step 5. If it doesn't then you have may have to shave some more of the outer edge of the wing. The hinge plate that attaches to the wing should be about flush with the edge of the wing. Attach with supplied screws.



Now attach the other wing. Pay attention to the same details.

Again, the wing won't sit quite flush with the top to allow for the hinges for the top extension.

10.

To attach the top extension make sure the outer edges are flush with the edges of the bench top. The edge of the hinge plate closest to the hinge pin should be about flush with the bottom edge of the extension.



Attach the clamp storage to the opposite end. The 2" x 4" will be flush with the outer edges of the frame and will lay flat up under the frame. Attach with wood glue and 2-1/2 spax screws.

Time to assemble the drill storage. Refer to the cutting tip on the Cut List on page 3. This will make sure all the pieces are the same width. Begin by drilling for 1-1/4 pocket screws in the 5 dividers. Attach them to the storage base with wood glue and pocket screws, spacing them about 3" apart.

To attach to the drill storage to the work bench flip it upside down. You will align it flush with the front of the frame and 5/8" away from the leg. This spacing will allow room for the left divider cap. Attach it to the frame with wood glue and spax screws.

Now attach the divider caps, centered on the dividers, with wood glue and 1-1/4" brad nails.

13.

To attach the peg board you will use wood glue and 3/4" staples. The board is flush with the bottom and outer edges of the legs.