

From Kaylabeen13 and her husband on Quiltingboard.com-

## How to Make a Sewing Table



I got this idea off the internet on someone's blog and just beefed it up. Not thinking their smaller design wouldn't hold up to the vibrations of the Juki while free-motioning.

### Materials list:

- $\frac{3}{4}$  inch cabinet grade plywood 4 strips  $3\frac{1}{2}$  wide by length to be determined by your table (could use a 2x4 cut to length) and 1 piece big enough for your machine plus at least 4 inches on either end
- 4-  $\frac{3}{8}$  inch carriage bolts 4 inches long
- 4-  $\frac{3}{8}$  tee nuts
- 12-  $\frac{3}{8}$  flat washers
- 12-  $\frac{3}{8}$  nuts
- 4 springs  $\frac{3}{4}$  inch inside diameter
- screws 2 inches long

- wood glue

#### Tools list:

- Skill saw with cutting guide or tablesaw
- drill
- pocket hole jig
- 1 inch Forstner bit
- forstner bit with same diameter as corner radius or machine base
- speed square and t square
- tape measure
- jig saw and fine wood blades
- 2-9/16 wrenches

1. First you need to decide where you want your machine on the top. Make sure it is behind the front table brace by at least  $\frac{1}{2}$  inch or so and make sure there is at least 4 inches clear on either side for the frame. Lay out machine base with a square and some type of circle that matches the corner radius (I had a lid on my work bench that was a match). Next transfer the measurements underneath and make sure it's clear of the front and 4 inches both sides.
2. Measure from front table frame to back and cut your 4 strips  $3\frac{1}{2}$  wide by your measurement plus add a couple inches for squaring up the ends. Now glue 2 strips together to make a  $3\frac{1}{2}$  by  $1\frac{1}{2}$  board ( you could use a 2x4 for this but I couldn't find a decent board in my lumber stash and I had the plywood already)
3. Next Measure your machine base to find out how big your platform needs to be. My wife's Juki has a base approximately 7x17 and I made the platform 14x30 just in case she ever wanted to change out to a bigger machine or add an acrylic tray. Your platform should be at least a couple inches deeper than your machine is and at least 8 inches wider to accommodate the side braces where it will hang from the bolts.

4. Next I cut the hole for the machine by using the forstner bit to drill the corners then a jigsaw to cut the straight lines on all 4 sides. Go slow and take your time it should turn out pretty straight
5. Next Flip your table over and lay out your brace on your right hand side of your machine a  $\frac{1}{2}$  from the hole. I attached it to the underside of the table with 2" screws as the board was 1  $\frac{1}{2}$  and the top was  $\frac{3}{4}$  so I had  $\frac{1}{4}$ " to spare.
6. Then lay your other brace the width of your platform away from your right hand brace ( outside to outside on mine was 30" same width as the platform) then attach that brace with a couple screws. Making sure to square up braces before attaching.
7. Next lay out the bolt holes for the platform Mine were 2" in from both corners. Drill a  $\frac{7}{16}$  inch hole on your 4 marks and transfer marks to both braces. Then remove them from the table but make sure you marked out where they go and which one is which.
8. Drill a  $\frac{1}{8}$  pilot hole on your 4 marks on the braces and flip over. Use your  $\frac{1}{8}$  pilot hole to drill in  $\frac{1}{2}$  with your 1" forstner bit to recess the carriage bolt head and teenut. Then drill out with  $\frac{7}{16}$  the rest of the way through.
9. Thread your tee nut on to the carriage bolt and slide through the holes in the braces with the head setting down in the recess. Gently tap the head to seat the tee nut. Slide a washer and thread a nut on the opposite side and snug down to seat the tee nut the rest of the way.
10. Drill pocket holes in both ends of the 2 braces to attach to front and back table frame. Reattach braces to table using marks and making sure braces go back to the same spots.
11. Slide platform over bolts and slide on 1 washer and 1 nut per bolt. Set machine in and adjust to desired depth then measure gap left between brace and platform. Cut springs to length twice the length of the gap but make sure they will compress to less than the gap (I bought 3 sets of springs and used the medium set all 3 sets were under \$10 total at the local hardware store in the bulk fastener section).

12. Remove platform and put springs between platform and braces with a washer between spring and platform the put washers and nuts on bottom side and adjust to height. When desired height is achieved thread on a 2<sup>nd</sup> nut and while holding first nut still tighten second nut jamming it and keeping platform from moving locking in height.
13. We added thread caps to protect our little guy's head if he ever gets under the table but not really necessary if you don't have little ones running around Pictures to follow.