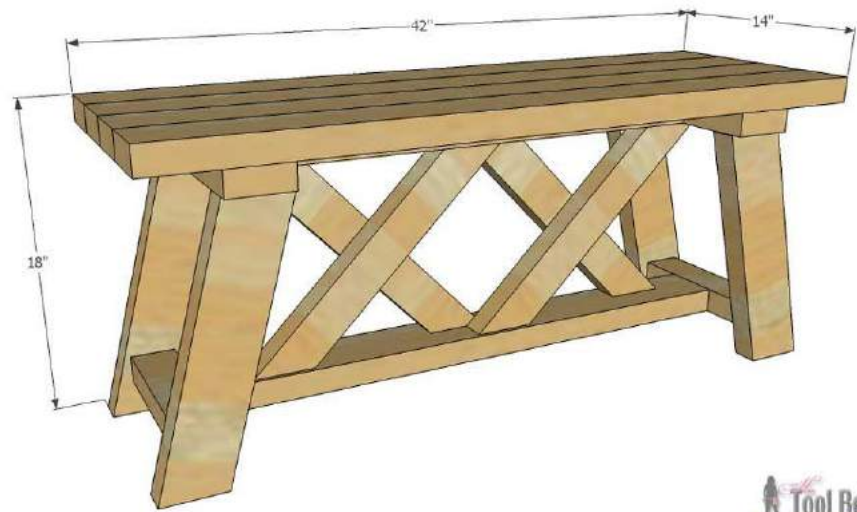


## How to Build a DIY Double X Bench



### Materials

- 4 - 2" x 4" x 8' boards
- 1 - 2" x 3" x 8' board
- 8 - 2 1/2" pocket hole screws
- 32 - 2 1/2" or 3" screws
- wood glue
- sandpaper
- stain/paint
- vaseline - optional
- paint brush

### Tools

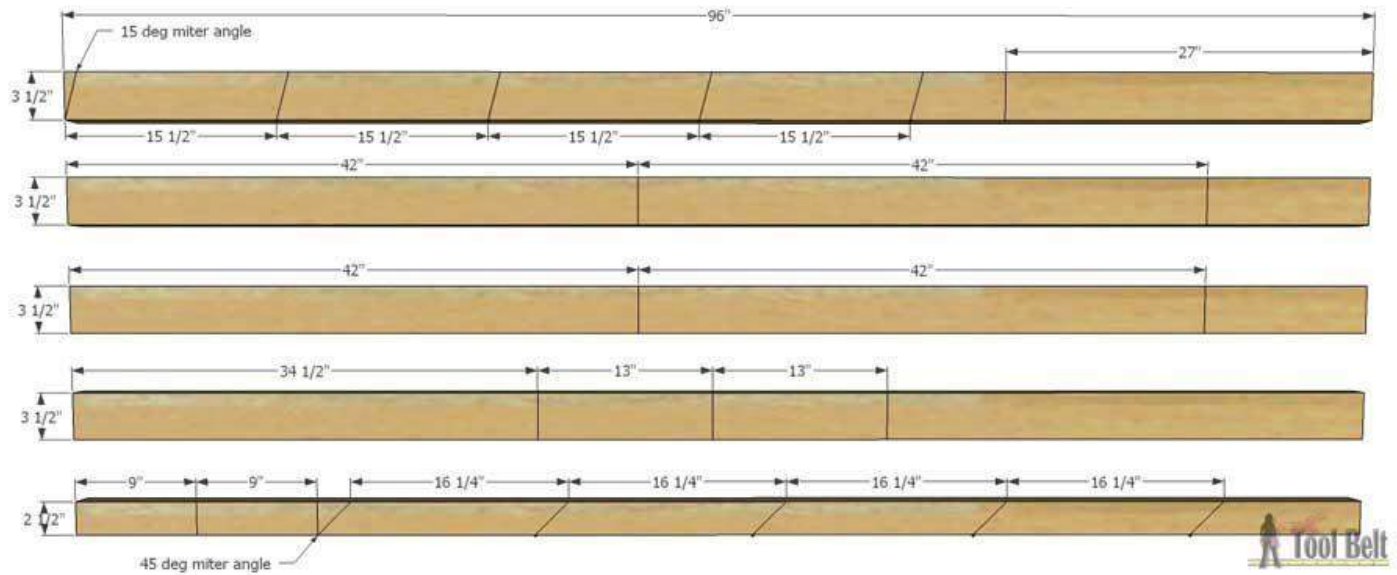
- miter saw
- drill
- countersink bit
- corner cat sander
- measuring tape
- Kreg pocket hole jig

### Cut List

- 4 - 1 1/2" x 3 1/2" x 15 1/2" with 15 deg miter cut on both ends (2x4)
- 1 - 1 1/2" x 3 1/2" x 27" (2x4)
- 4 - 1 1/2" x 3 1/2" x 42" (2x4)
- 1 - 1 1/2" x 3 1/2" x 34 1/2" (2x4)
- 2 - 1 1/2" x 3 1/2" x 13" (2x4)
- 2 - 1 1/2" x 2 1/2" x 9" (2x3)
- 4 - 1 1/2" x 2 1/2" x 16 1/4" with 45 deg miter cut on both ends (2x3)

Cut all of the pieces for the bench, see the cut diagram for visual reference.

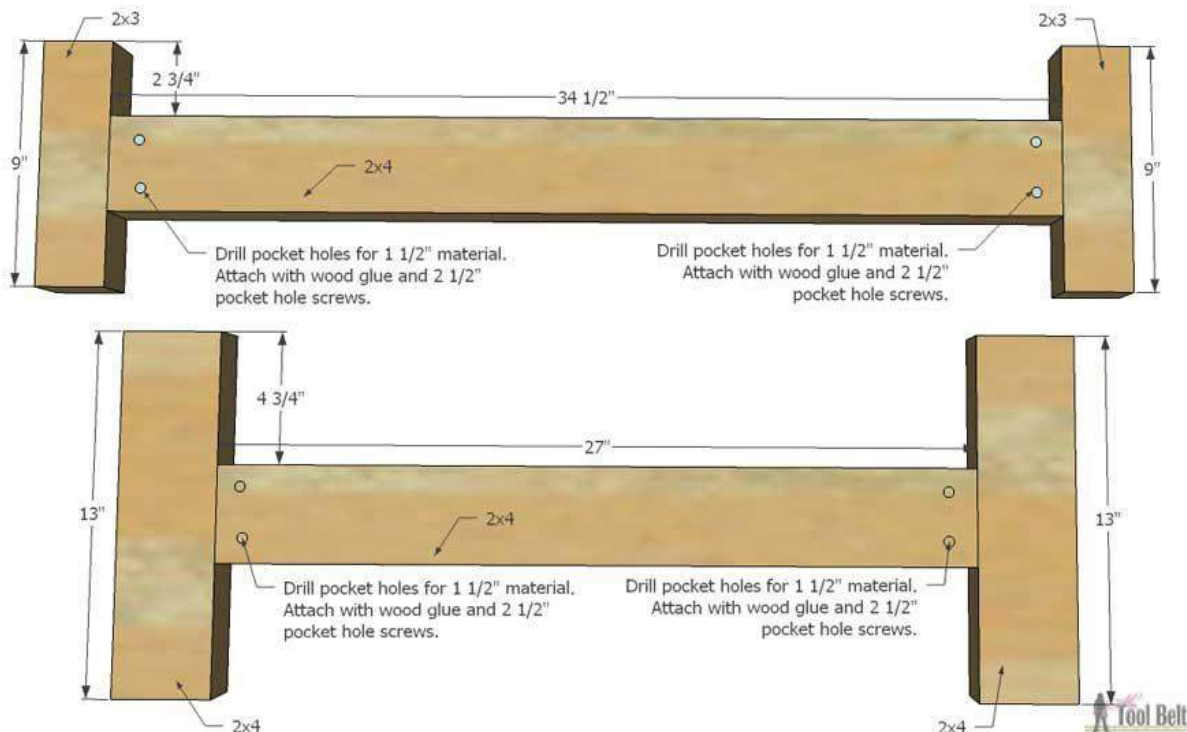
## Cut Diagram



## Step 1

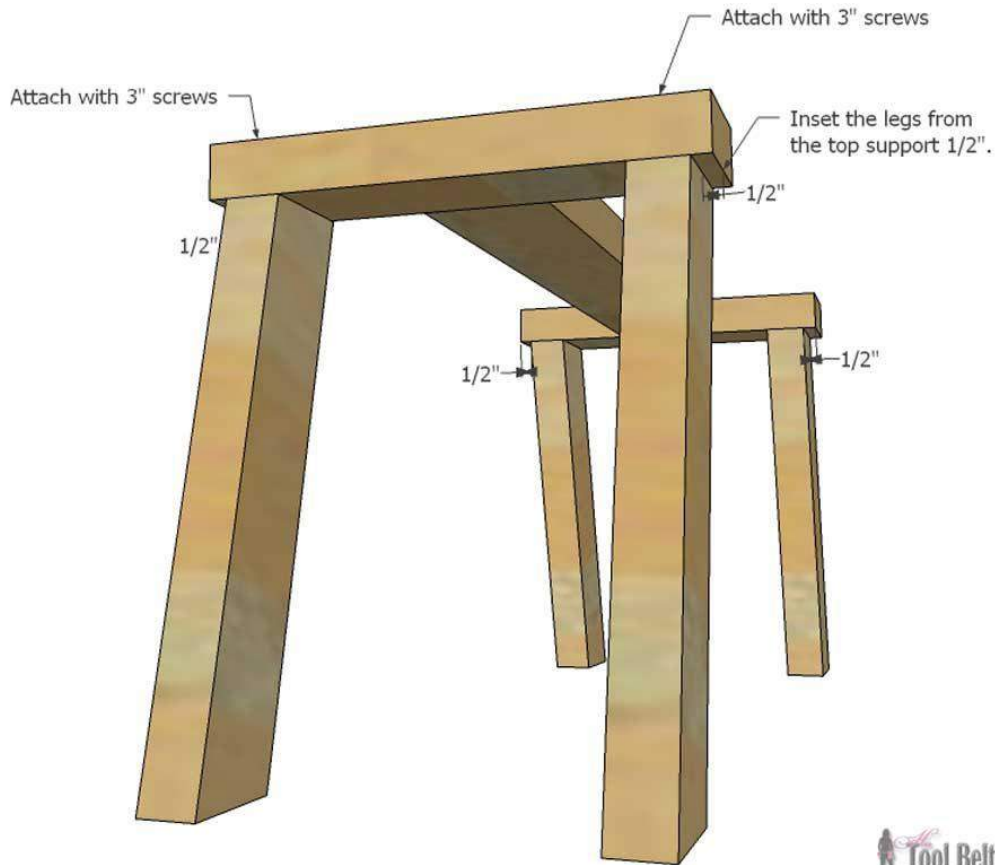
Drill pocket holes for 1 1/2" material in both ends of the 34 1/2" and 27" boards.

Measure and mark the center of the 13" and 9" pieces, also mark the center of both ends of the 34 1/2" and 27" pieces. Using wood glue and 2 1/2" pocket hole screws, attach the center of the 9" pieces to the ends of the 34 1/2" piece. Repeat for the center of the 13" pieces and the 27" piece.



## Step 2

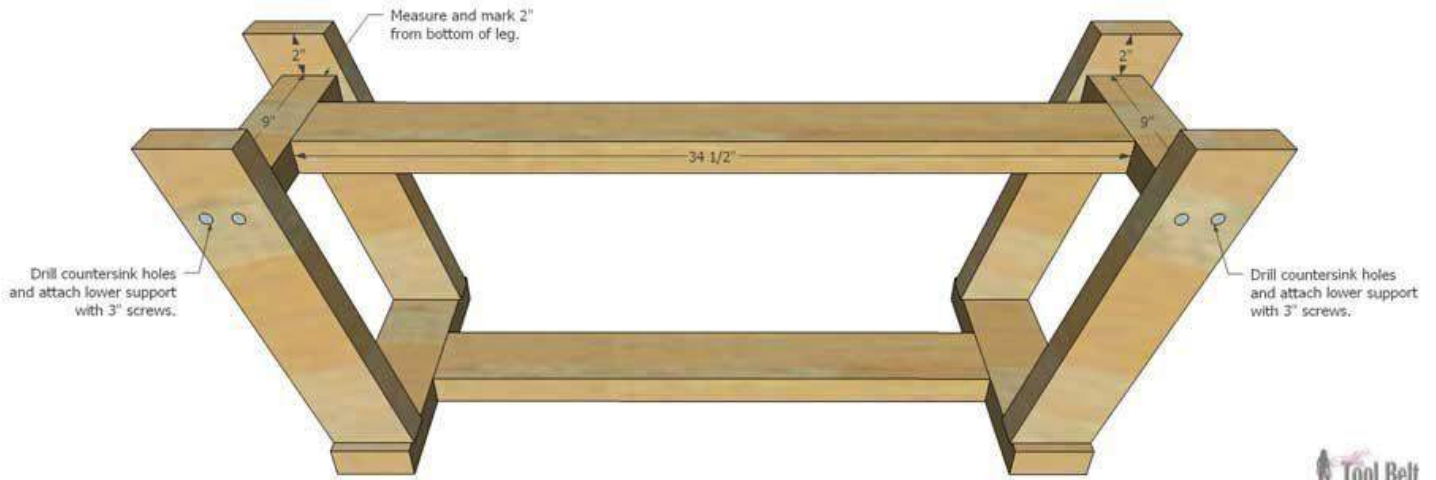
Measure and mark 1/2" in from each 13" piece end. The legs will inset 1/2" in from each 13" piece end.



Use the countersink bit and pre-drill countersink holes for screws to attach the legs to the 13" pieces. Use either 2 1/2" or 3" screws to attach the legs to the 13" pieces. (Note: the legs won't fit perfectly onto the 13" pieces; overhang the same amount on each leg.)

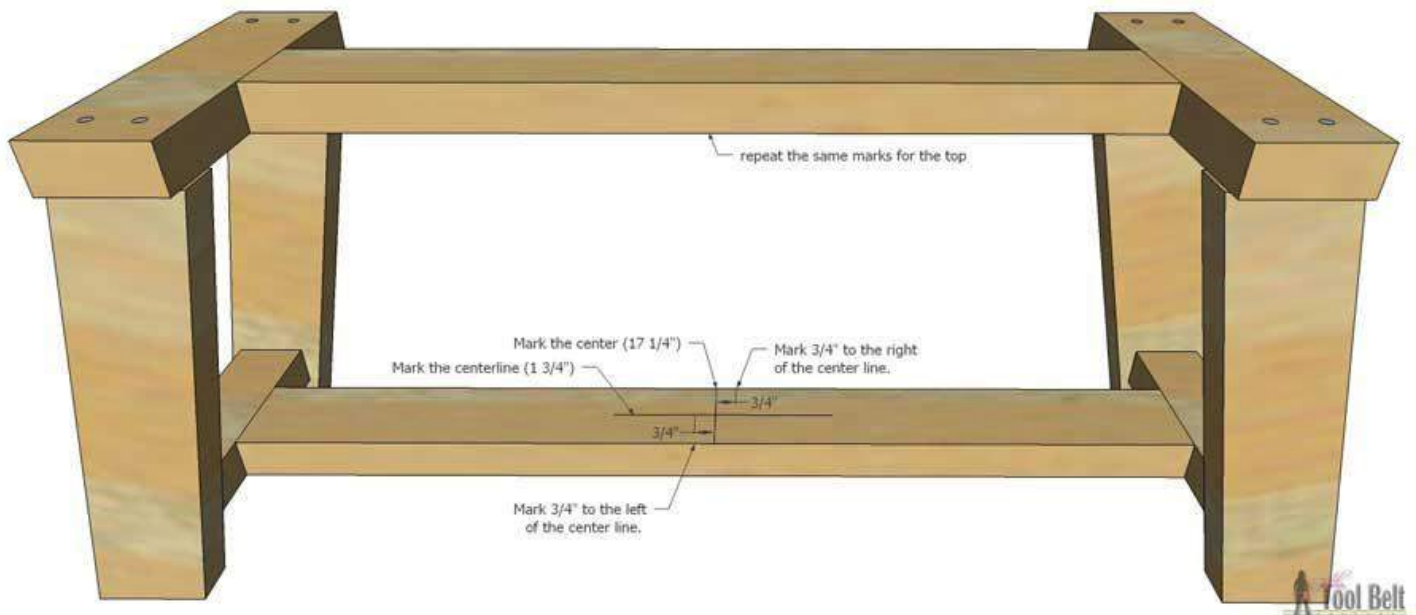


Turn the leg assembly upside down and mark 2" down on each leg end. Pre-drill countersink holes in the outsides of the legs. Attach the 9" pieces between the legs using 2 1/2" or 3" screws.



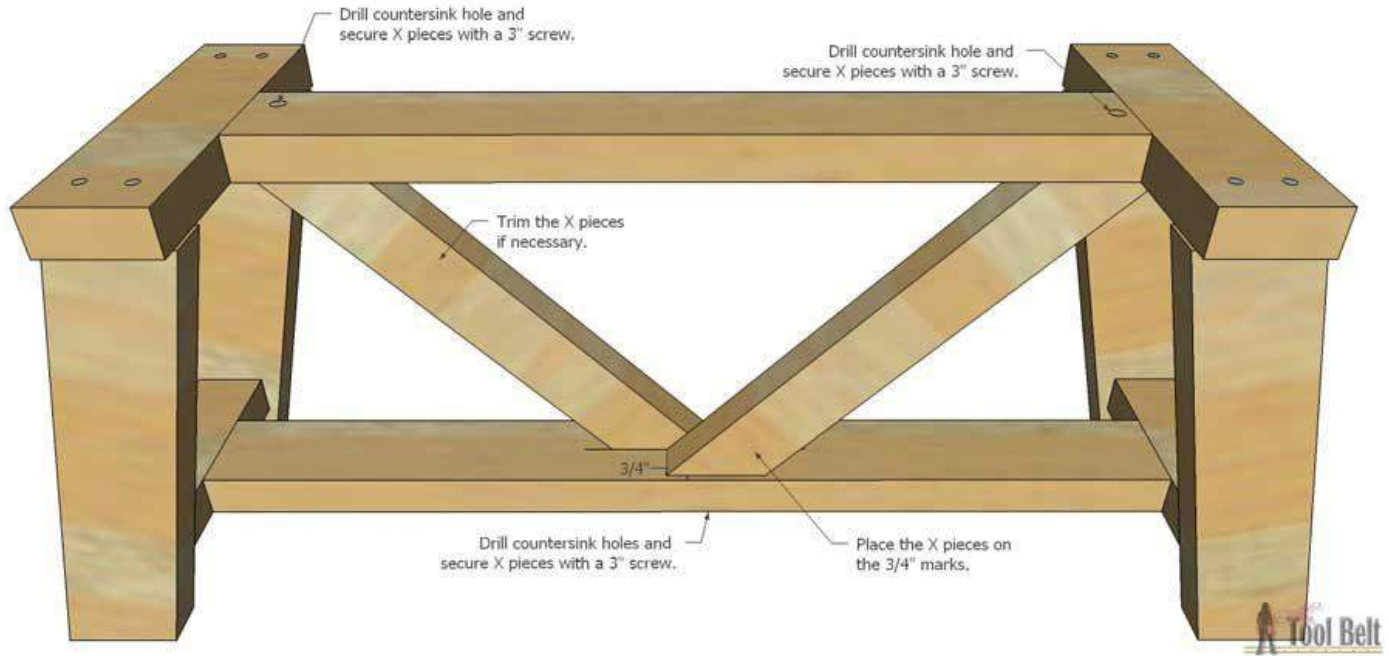
### Step 3

Measure and mark the center line for the length and width on the 34 1/2" piece. Mark 3/4" on both sides of the length center line mark. Repeat the same marks on the 27" piece.

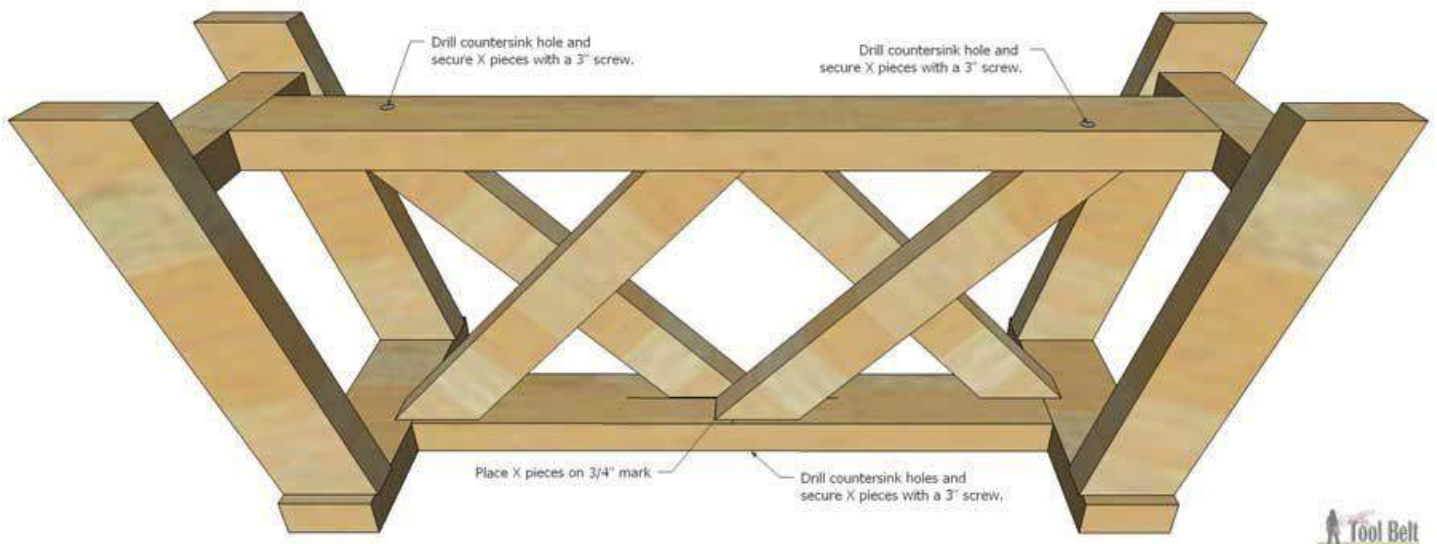




Slide 2 of the 16 1/4" X pieces in between the top and bottom supports, trim the 16 1/4" pieces if necessary. Line up the ends of the X pieces with the 3/4" marks and the center line mark between them. Drill countersink holes in the 34 1/2" and 27" pieces, attach each X piece with a 2 1/2" or 3" screw.

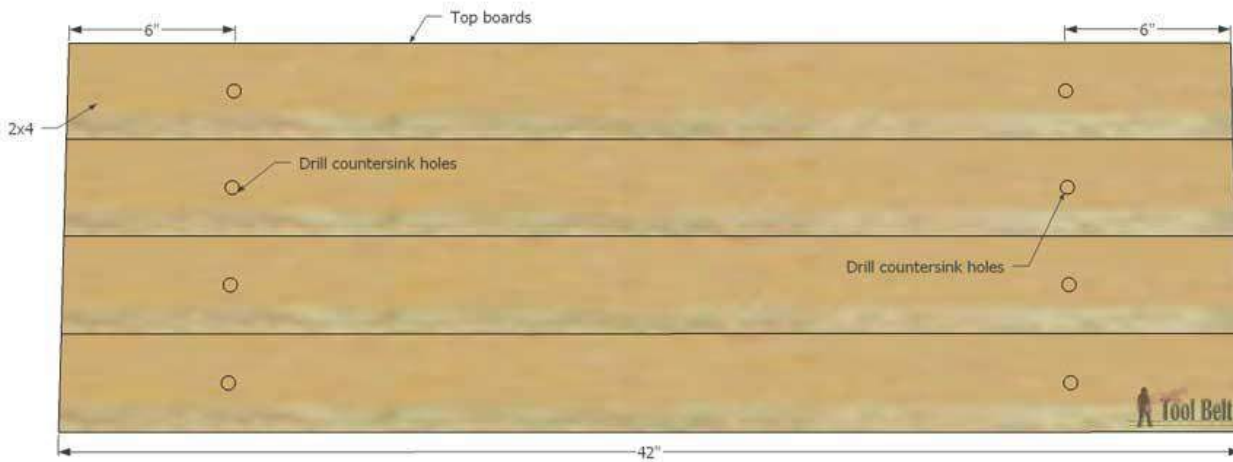


Flip the bench over, slide the other 2 - 16 1/4" X pieces in between the top and bottom supports, trim the 16 1/4" pieces if necessary. Line up the ends of the X pieces with the 3/4" marks and the center line mark between them. Drill countersink holes in the 34 1/2" and 27" pieces, attach each X piece with a 2 1/2" or 3" screw.



### Step 4

Measure over about 6" from the 42" board ends, pre-drill countersink holes to attach the top pieces to the base.



The top will overhang 1/2" from the 13" pieces on the side and about 4" from the ends. Attach the top boards to the base with 2 1/2" screws.

