

Toy Box and Seating Bench

Tools and Materials:

wood glue
table saw with dado blade
drill press (or band saw)
rubber mallet
pneumatic nailer
safety glasses
dust mask
finishing nails
3-inch trim screws
drill with screwdriver attachment
cleats
1/2-inch plywood
2x4s
beadboard plywood
router with rabbet bit
piano hinge
lid support



Steps:

1. First cut 2x4s to size for the frame. Carve tenon joints (**figure A**) and mortise joints (**figure B**) on the ends of the 2x4 framing pieces. Use a table saw with a dado blade to cut the tenon joints and use either a drill press or band saw to carve mortise joints. Always wear eye protection and a dust mask when working with power tools.
2. Before assembling the frame, cut side pieces out of beadboard 7-3/4 inch wide and then cut the pieces to length.
3. Apply wood glue along the tenons and tap the pieces together to assemble the end pieces.

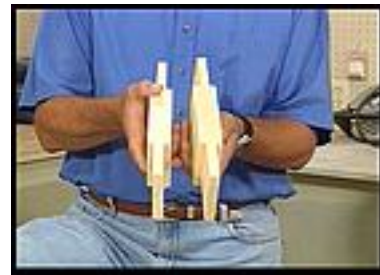


Figure A



Figure B



Figure C



Figure D



Figure E



Figure F



Figure G

4. Before capping off the end pieces, slide pre-cut beadboard sections into grooves cut along the inside of the pieces and tap final frame piece into place using a hammer and scrap piece of wood (**figure C**).

5. Finish the end pieces using a pneumatic nailer with finishing nails to hold the pieces together.

6. Assemble the front and back pieces the same way as the end pieces. Then attach all four sides together using 3-inch trim screws (**figure D**).

7. Next, attach cleats around the bottom of the box using the pneumatic nailer. Finally, attach the 1/2-inch plywood bottom to the cleats (**figure E**).

8. Begin assembling the backrest frame by drilling pilot holes in the frame. Then use 3-inch screws to assemble the pieces of the frame together. Next, attach a 2x4 piece to the back of the toy box as the bottom of the back frame.

9. Slide the rest of the frame into place and attach it to the back of the toy box (**figure F**).

10. With the frame in place, use a router with rabbet bit to make a groove to support the beadboard panel.

11. Apply glue all around the groove and put the back in place (**figure G**) and secure the back with finishing nails using the pneumatic nailer.

12. Attach the piano hinge to the lid using the supplied screws. These are small screws so make sure when tightening the screws you don't strip them out. You have to have a small clearance between the lid and box to open and close the lid (**figure H**).

13. Attach a lid support designed for toy boxes to provide protection against slamming (**figure I**).

14. Prime and paint toy box as desired.



Figure H



Figure I