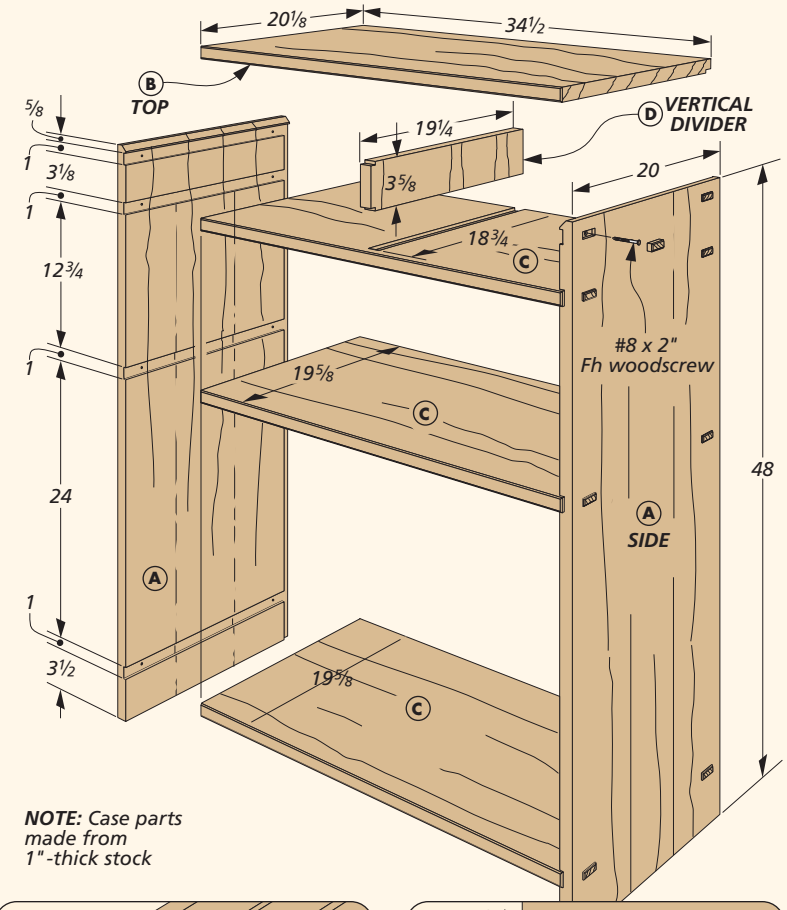
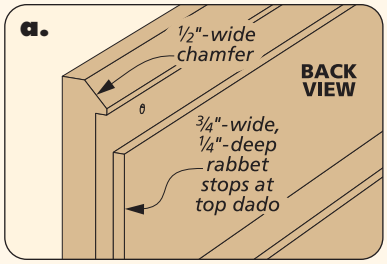
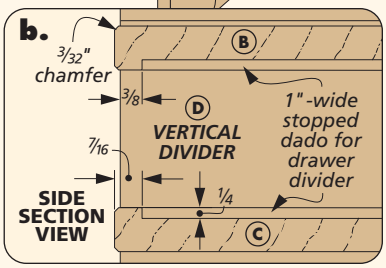
lower case CONSTRUCTION







I like to think of this tool cabinet as the trusty sidekick to my workbench. I do most of my work at or near the workbench — everything from planing and routing, to trimming joints and assembly. So it's important to have all the tools I need close at hand.

When it comes to building a big project like this, it can be a little intimidating. So I find it's helpful to step back and break it down into sections so you don't get overwhelmed by the details. That's what I did here. The tool cabinet is made up of four different elements: the case, doors, drawers, and trays.

SOLID WOOD CONSTRUCTION. The first section of the cabinet to build is the case, as shown in the drawing at right. Since all the case members are the same thickness, I glued up all the parts at one time.

With such large solid-wood panels, it's a good idea to spend some extra time in selecting and arranging your stock for color, grain, and appearance.

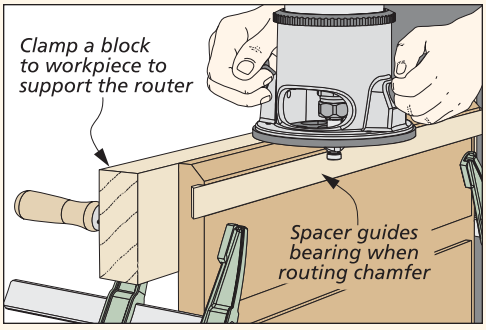
DADO JOINERY. At first glance, it looks like the case is built with through-mortise and tenon joinery. However, the tenons you see are simply plugs. They hide long woodscrews that secure the sides to the horizontal parts. Dadoes on the inside of the case help support the dividers. Using false tenons and screws gives you a traditional look without all the work.

The case is assembled with simple dado joints. You can cut the dadoes with either a table saw or hand-held router. It's not important how you cut the dadoes. But because the ends of the dadoes are visible, it is important that the bottoms of the dadoes are smooth and flat. (I prefer to use a dado clean-out bit to end up with the smoothest bottom possible.)

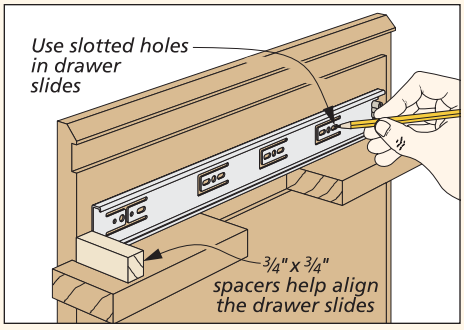
There's just one other thing to mention about the dadoes. They should match the thickness of the stock as close as possible for the tightest, strongest joint.

SIDE DETAILS. Before moving on to the dividers, there are a few more things you'll need to do to the sides. First, cut a chamfer along the top

Shop Tips: Chamfers and Slides



Routing the Chamfer. *A support board clamped to the case side and a spacer in the dado allow you to easily rout the chamfer.*



Drawer Slides. *Pre-drill the holes for the top drawer slides before assembly. Support blocks and a spacer keep things aligned.*

inside edge of each side panel. Take a look at the left box on the bottom of the opposite page for a tip on the best way to do this.

The second thing to do is rout a rabbet on the back edge to hold a frame and panel back that is made later (detail 'a' on the opposite page). This rabbet is stopped at the top divider dado and doesn't run the whole length of the side.

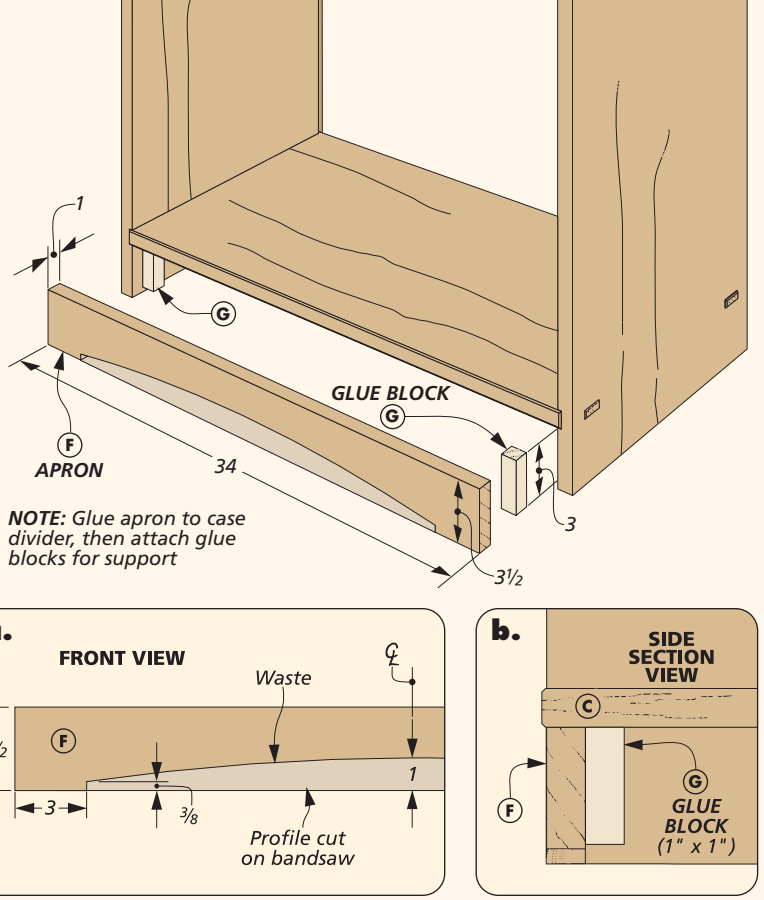
The last thing you'll need to do is rout small mortises in each side to hold some false tenons that hide woodscrews. I used a simple router template to do this. It's shown below and on page 22. Even though the case is going to be glued, the end-grain joints need some screws for reinforcement.

SIMPLE DIVIDERS. At this point, you can set aside the sides and work on the dividers. These are the horizontal panels that make the top, bottom, drawer, and cabinet dividers. You can see the dimensions for each divider in the drawing.

The front edge of each divider sits proud of the case sides and is chamfered on the front. Plus, the case top and upper drawer divider have centered, stopped dadoes cut in each panel to hold a short, vertical divider between a pair of narrow drawers. You can see this illustrated in detail 'b' on the opposite page.

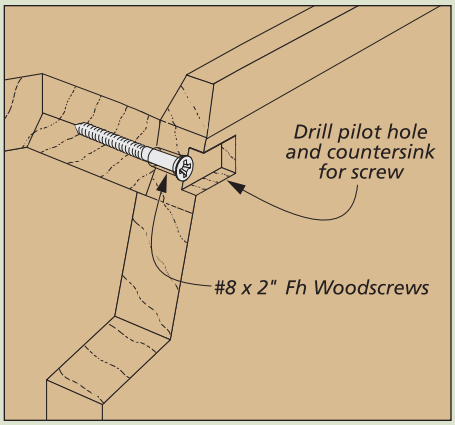
There's one last thing to do before assembling the case. And that's to install the drawer slides for the two upper drawers. I did this now because after the case is together, it will be nearly impossible to reach inside the small opening, drill the holes and then align the slides. Take a look at the right drawing on the opposite page to see how I did this. The case can then be assembled.

APRON AND GLUE BLOCK. To complete the front of the case, I added an apron at the bottom, as in the drawing above. It has a shallow arch and is glued to the divider above and a pair of glue blocks.

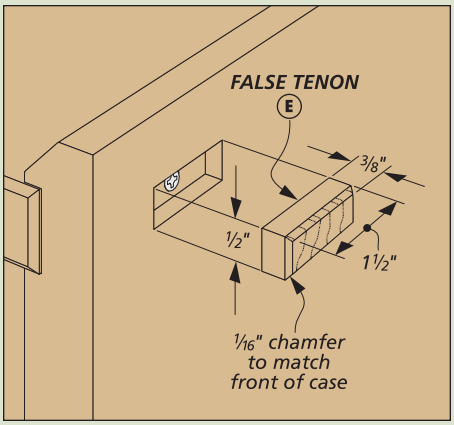


How-To: Hiding Screw Joints With False Tenons

▲ A simple router template and a hand-held router are all it takes to cut the shallow pockets for the false tenons. To find out how to make the template, turn to Shop Notebook on page 22.



Woodscrew Reinforcement. *After routing the pocket for the false tenon, square up the corners with a chisel and drill a countersunk shank hole and pilot hole for the 2"-long woodscrew.*



Hide the Screws. *Chamfered false tenons fit snugly in the pockets routed in the cabinet sides and hide the woodscrews. Once they're made (turn to Shop Notebook on page 22), simply glue them in place.*