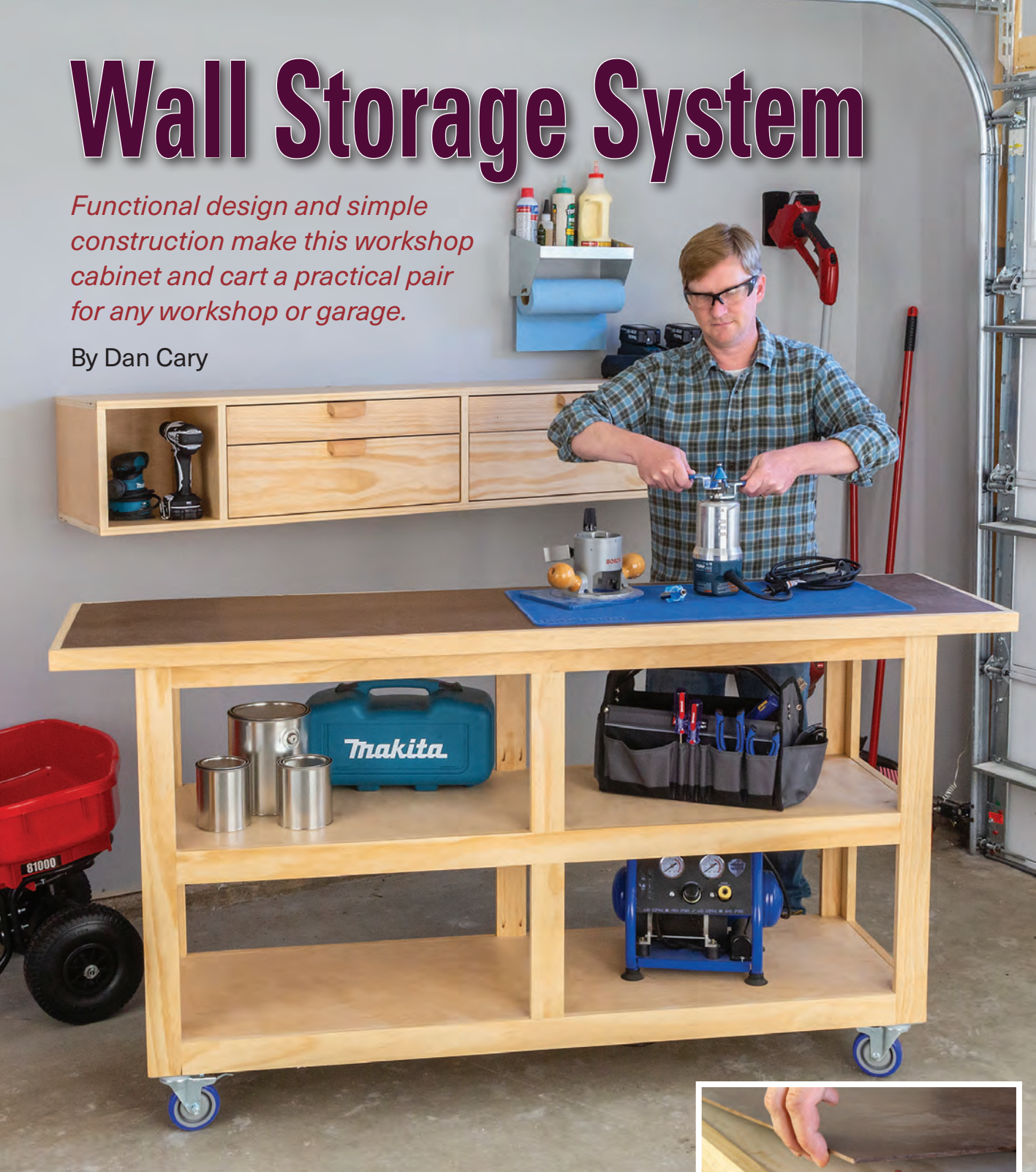


Wall Storage System

Functional design and simple construction make this workshop cabinet and cart a practical pair for any workshop or garage.

By Dan Cary

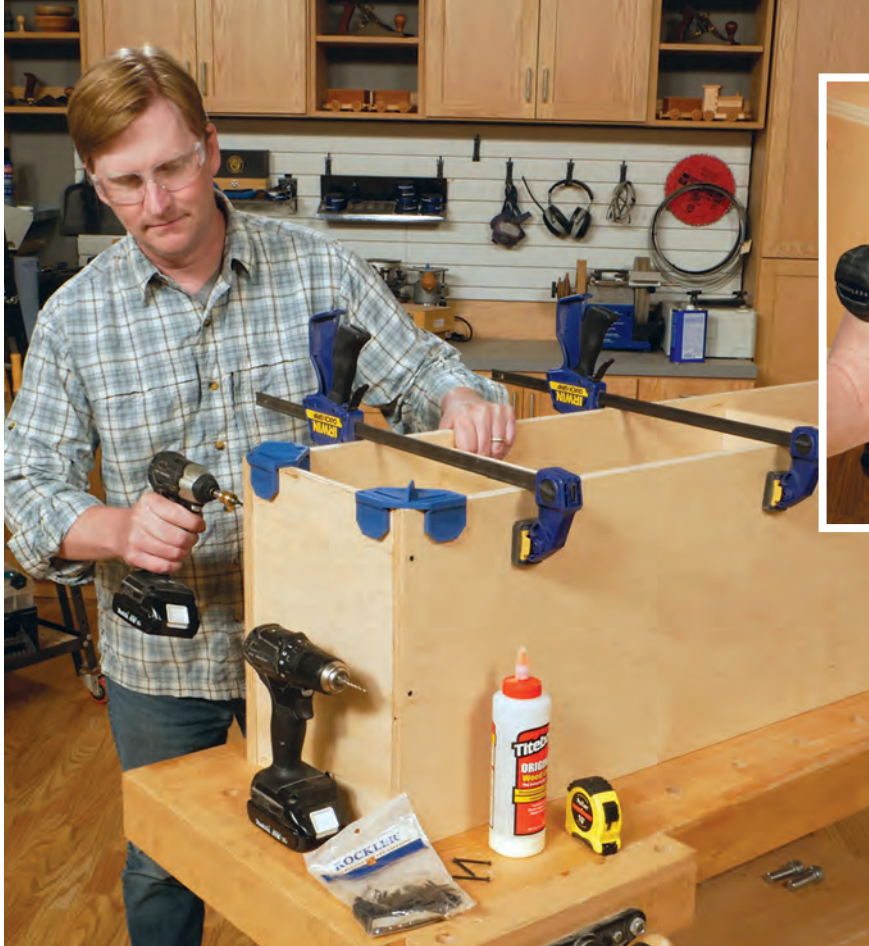


Most woodworkers wish they had more dedicated shop space. If the area you have for woodworking is carved out of a shared space, such as a garage or shed, or if it's used regularly by multiple people, you'll likely need to keep your woodworking tools organized and out of the way when not needed to make the most of the room you've got.

With that in mind, we asked Minneapolis woodworker Jacob Garrison to design a couple of workshop fixtures that provide both flexible storage and a work surface. The results are this wall-mounted cabinet with drawers and workbench on casters. The two are made to work well together, with the cart nesting under the wall cabinet when not in use.



An access hole in the cart's sub top makes it easy to pop out the hardboard work surface and replace it whenever necessary.



While “finer” woodworking projects often call for fancier joinery, utilitarian shop projects of this sort are well served by simple butt joints.

and screws — we used trim head screws that don’t need to be hidden by wood plugs. Now add a pine face frame to the cabinet’s front edges with glue and brad nails to hide the plywood edges.

The cabinet’s drawers are shallow and wide to keep their contents organized

Assemble the cabinet’s top, bottom, ends and drawer supports with glue and #6 x 1½” trim head screws. The size of these screw heads is so small that you can skip covering them with wood putty or plugs. Rockler’s Clamp-It Clips (#58849) are helpful “third hands” during a big assembly like this.

We started by limiting them to a depth of no more than 20" (less being even better). That way the workbench cart can be pushed against most garage walls so it won’t interfere with a parked car. Mobility also adds to its versatility: just roll the workbench out and use it wherever you need it most.

Common home center plywood, hardboard and pine trim are smart choices to help keep this no-nonsense shop project budget friendly.

Building the Wall Cabinet

We’ve kept the wall cabinet’s design simple here so that even a beginner can build it with just a few tools. Following the *Material List* on page 60 and the photos above, lay out and cut the cabinet’s top, bottom, ends, drawer supports and back panel to size from a sheet of ¾" plywood. It’s easiest to cut the parts with a table saw, but you could also use a circular saw and straightedge. Assemble the cabinet carcass with glue



Cut ¼"-deep x 1/8"-wide drawer bottom grooves in all of the drawer fronts, backs and sides to fit the thickness of your hardboard stock. Locate these grooves 1/2" up from the bottom edges of the drawer parts. While a table saw makes quick work of these cuts, you could also use a router or circular saw paired with a guide fence.

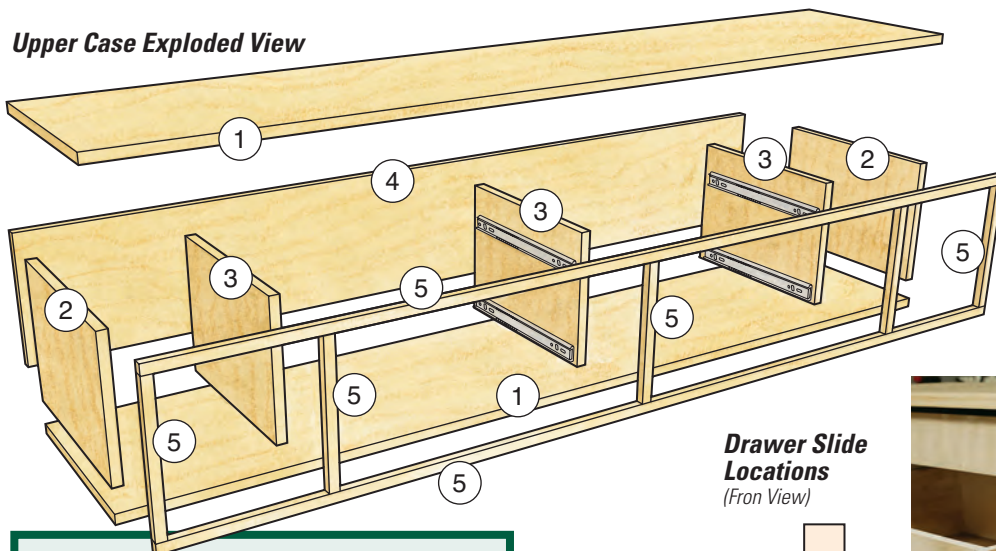


Assemble the drawer boxes with glue and 1¼" brad nails. Measure across their diagonals to make sure the boxes are square; adjust them if needed.



Attach 1/2"-thick drawer bottom supports beneath each drawer’s bottom, as well as to the front and back panels, with glue and brad nails.

Upper Case Exploded View

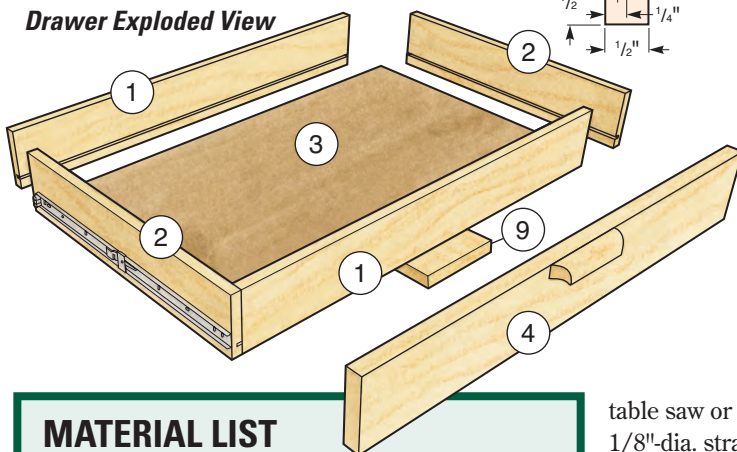


MATERIAL LIST

Upper Case

	T x W x L
1 Top, Bottom (2)	3/4" x 15" x 72"
2 Ends (2)	3/4" x 10 1/2" x 15"
3 Drawer Supports (3)	3/4" x 10 1/2" x 14 1/4"
4 Back (1)	3/4" x 10 1/2" x 70 1/2"
5 Face Frame (1)	5/8" x 3/4" x 200"

Drawer Exploded View



MATERIAL LIST

Drawers

	T x W x L
1 Upper Drawer Fronts, Backs (4)	1/2" x 2 1/2" x 21 3/4"
2 Upper Drawer Sides (4)	1/2" x 2 1/2" x 14"
3 Upper Drawer Bottoms (2)	1/8" x 13 1/2" x 22 1/4"
4 Upper Drawer Faces (2)	3/4" x 3 1/2" x 23 1/2"
5 Lower Drawer Fronts, Backs (4)	1/2" x 5 1/2" x 21 3/4"
6 Lower Drawer Sides (4)	1/2" x 5 1/2" x 14"
7 Lower Drawer Bottoms (2)	1/8" x 13 1/2" x 22 1/4"
8 Lower Drawer Faces (2)	3/4" x 6 5/8" x 23 1/2"
9 Drawer Bottom Supports (4)	1/2" x 2 1/2" x 13"

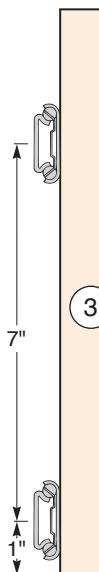
without getting buried. Cut the drawer fronts, backs and sides to shape. Their inside faces require a 1/8"-wide x 1/4"-deep groove, located 1/2" up from the bottom edges, for installing the drawer bottoms, so plow them now with a

table saw or a router and 1/8"-dia. straight bit. Dry assemble one of the drawers to measure its interior for a bottom panel, and cut the four bottoms from 1/8"-thick hardboard. Assemble the corners of the drawer boxes with glue and brad nails. Then, install a 1/2"-thick support underneath the drawer bottoms to stiffen them.

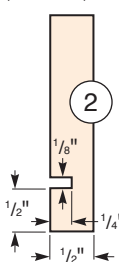
Fasten drawer slides

inside the cabinet openings and to the drawers to hang them. Finish up the cabinet by attaching faces and pulls on the drawers. To mount the cabinet, just drive 3" screws through its back panel and into each wall stud behind it.

Drawer Slide Locations (Front View)



Drawer Bottom Groove (End View)



Mount the slide components to the cabinet and drawer sides so the drawer boxes are set back 3/4" from the cabinet's front. Adding drawer faces will bring the drawers flush with the face frame.

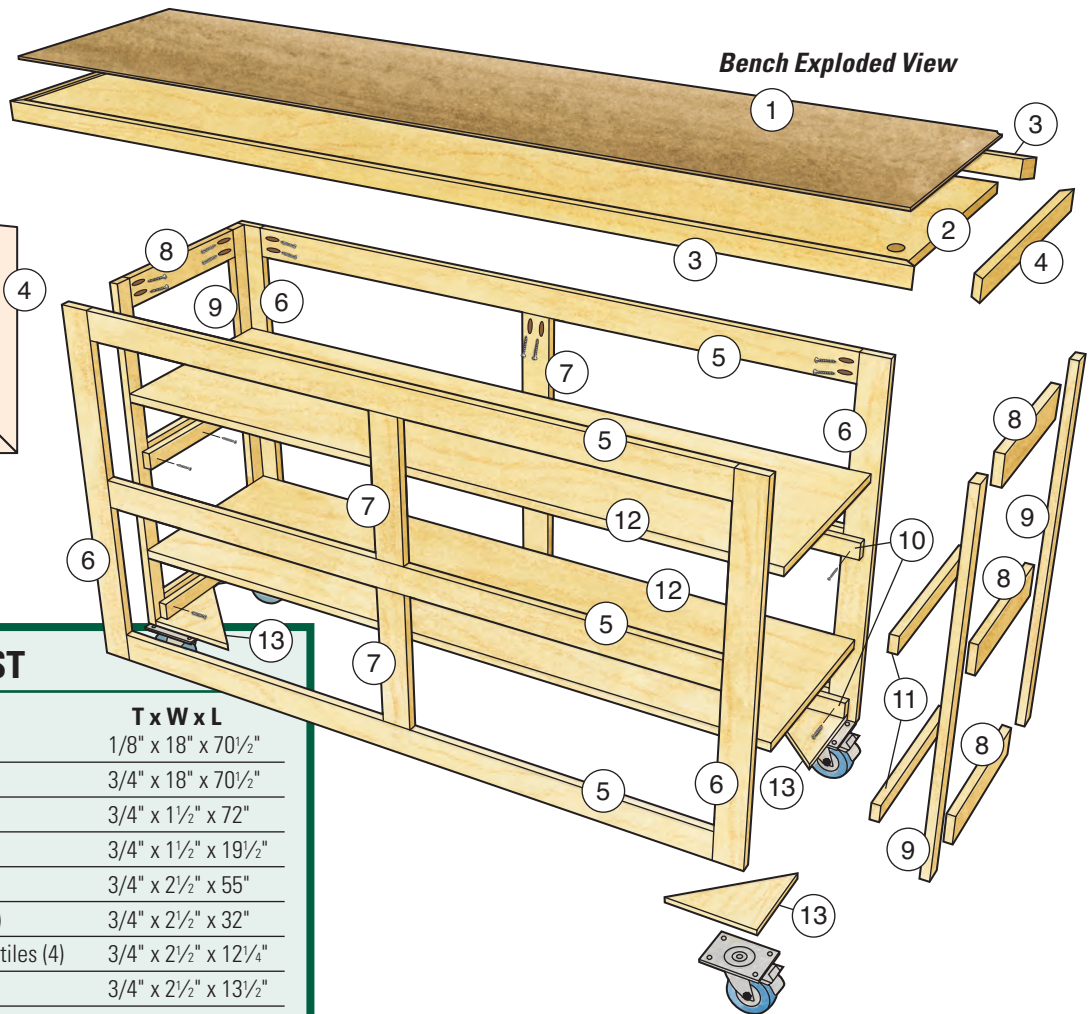
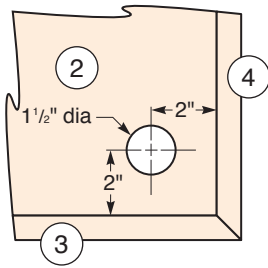


Temporarily attach a drawer face to each drawer box front with double-sided tape. Check for even alignment in the cabinet, then secure the drawer faces with 1/4" washerhead screws.

Making the Workbench Cart

The workbench cart is also designed for easy construction. As you'll see in the drawings on the next page and the photos to follow, it consists of long and short wood frames that support the work surface and two shelves beneath. Cut the long and short frame rails and stiles to size, and assemble the four frames with pairs of 1 1/4"-long pocket hole screws at each joint. Bring the frames together to form the bench's base by driving 1 5/8" screws through the end stiles of the long frames and

Finger Hole Location (Top View)



MATERIAL LIST

Work Bench

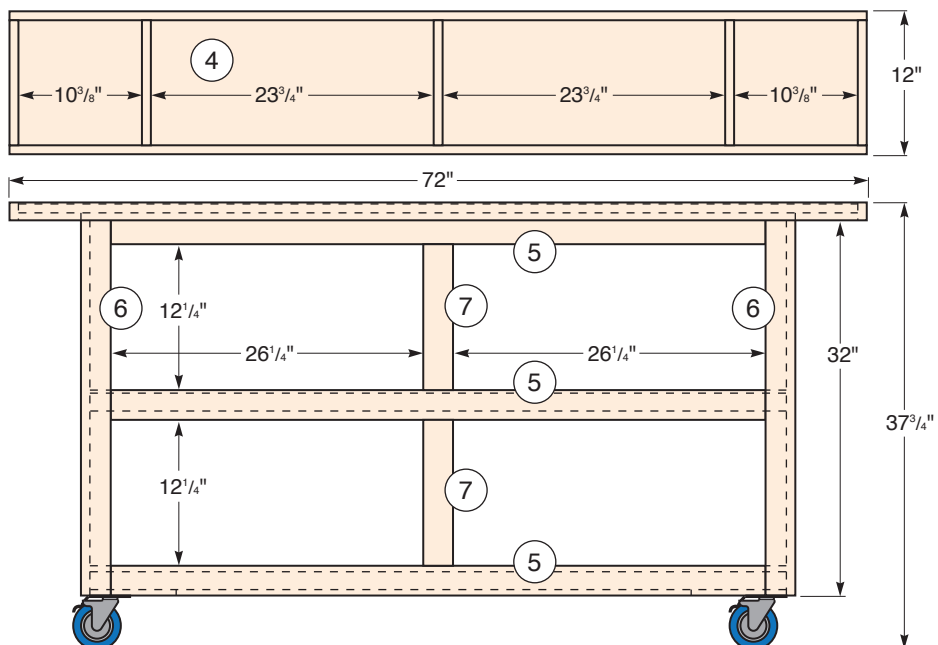
	T x W x L
1 Hardboard Top (1)	1/8" x 18" x 70 1/2"
2 Sub Top (1)	3/4" x 18" x 70 1/2"
3 Long Top Trim (2)	3/4" x 1 1/2" x 72"
4 Short Top Trim (2)	3/4" x 1 1/2" x 19 1/2"
5 Long Frame Rails (6)	3/4" x 2 1/2" x 55"
6 Long Frame Stiles (4)	3/4" x 2 1/2" x 32"
7 Long Frame Center Stiles (4)	3/4" x 2 1/2" x 12 1/4"
8 Short Frame Rails (6)	3/4" x 2 1/2" x 13 1/2"
9 Short Frame Stiles (4)	3/4" x 1 1/2" x 32"
10 Long Shelf Supports (4)	3/4" x 1 1/2" x 58 1/2"
11 Short Shelf Supports (4)	3/4" x 1 1/2" x 15"
12 Shelves (2)	1/2" x 16 1/2" x 58 1/2"
13 Caster Blocks (4)	1/2" x 8" x 8"

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MORE ON THE WEB



To watch a video about organizing drawers with Lock-Align products, please visit woodworkersjournal.com and click on "More on the Web" under the Magazine tab.

Cabinet and Bench Assembly (Front View)





Position and clamp the long and short shelf supports 1/2" below the top edge of the middle and bottom frame rails. Attach these supports with 1/4" wood screws.



Cut the bench frame parts to size, and bore pairs of pocket holes in the ends of the rails and center stiles (inset). Assemble the long and short frames with 1/4" pocket hole screws. Attach the long frames to the edges of the short frames with #6 x 1 5/8" trim head screws at each corner joint to form the bench base.

into the edges of the short frames. Now cut and install shelf supports inside the base with 1/4" screws. With those in place, cut and install the plywood sub top on top of the frame and the shelves on the supports with glue and brads — this stiffens the cart and provides stability.

Notice in the *Drawings* and bottom right photo that the sub top has a 1 1/2"-dia. through hole drilled near one corner. It will enable you to push out and replace the 1/8" hardboard work surface if it should ever become damaged. Wrap the edges of the sub top with pieces of long and short trim, glued and brad-nailed in place, to form a shallow recess for the work surface.



After installing the sub top and shelving, invert the bench base and attach caster blocks to the corners with glue and brad nails. Mount the casters on the blocks with 1" panhead screws.

Lock-Align System Can Upgrade Drawers



Rockler's Lock-Align Drawer Organizer System is a collection of various interlocking components designed to store a variety of supplies. The system uses a combination of repositionable dividers that form a grid, plus bins or trays to line the drawer. Specialized trays are also available for holding specific tools including pliers, screwdrivers or driver tips. You can add components as needed to further customize your drawers.



Miter-cut trim pieces to fit around the top of the bench frame. Attach it with glue and brad nails. Use a scrap of the hardboard top material as a spacer to help position the top edges of the trim.

Wall Storage System Hard-to-Find Hardware

4" Heavy-Duty Polyurethane Casters (2) #23030 \$29.99 pr.
European Beech Wood Pull (4) #23127 \$3.99 ea.
75-lb. Full-Extension Drawer Slides - Centerline® 3612 (4) #44506 \$11.99 pr.
Rockler Lock-Align Drawer Organizer System, Starter Kit (1) #56117 \$24.99 ea.
Trim Head Square Drive Screws 6 x 1 5/8" (1) #61226 \$6.99 pk.

To purchase these and other products online, visit www.woodworkersjournal.com/hardware
 Or, call 800-610-0883 (code WJ1577).

Finally, install a piece of triangular plywood blocking to the underside of the cart at each corner. Attach 4" locking casters to this blocking with 1/4" x 1" screws to make this cart a breeze to roll around the shop and park wherever you need to use it for your next project.