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Artist's Pencil Box

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- Step by Step construction instruction.
- A complete bill of materials.
- Exploded view and elevation drawings.
- How-to photos with instructive captions.
- Tips to help you complete the project and become a better woodworker.

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Artist's Pencil Box

Here's a quick project you can make for an aspiring young artist. It recalls a time when even a set of pencils befitted a special wooden container. Our design will hold a collection of colored pencils and an eraser for carting along in a bag or backpack. It's a perfect way to put some attractive or exotic scrap wood to good use.

Years ago, colored pencils came in a wooden box instead of today's impossible-to-open plastic blister packages. A wooden box seemed to make the pencils more special. In fact, the designer of this project still has a pencil box he received as a boy, which sits on his desk next to his computer to remind him of simpler times. Thinking about those cherished pencils one day, he realized what an ideal gift project it would make. A little time at the drawing board produced the project you see here—it's a fitting keepsake you could give to that budding artist in your life.

The key to making this pencil box is to construct it as one assembly and then rip it in half to separate the upper and lower compartments. This may seem strange, but it's actually a common box-making technique. The two units are then held together by a dowel, which allows them to swing apart when the top is slid back.

Cutting the Parts to Size

Get started on this pencil box by cutting a 3/4" x 3" x 24" piece of stock and resawing it in half with your band saw. Plane the thin strips down to 5/16" in thickness and cut the sides (pieces 1) to size from this stock. Next, plane some of this resawn stock down to 1/8" for the top, middle panel and bottom panel (pieces 2, 3, and 4), and finish up by machining some 1/2" material for the endwalls (pieces 5 and 6).

Now you can rout the grooves in the sides and endwalls. Chuck a 1/8" straight bit in your router table and rout the grooves for housing the middle and top panels, as shown in the *Side Panel Groove Locations Drawing* on page 107. Rout the grooves 1/8" deep, carefully setting your stock onto the bit at the starting point and lifting it off the bit when you reach the stopping line. Be sure to stop the front end of the top groove and both ends of the middle groove 1/4" from the ends of the stock (see *Figure 1*).

Figure 1: *Outline the bit's cutting area on the fence, then use the lines as starting and stopping points when routing the stopped grooves.*

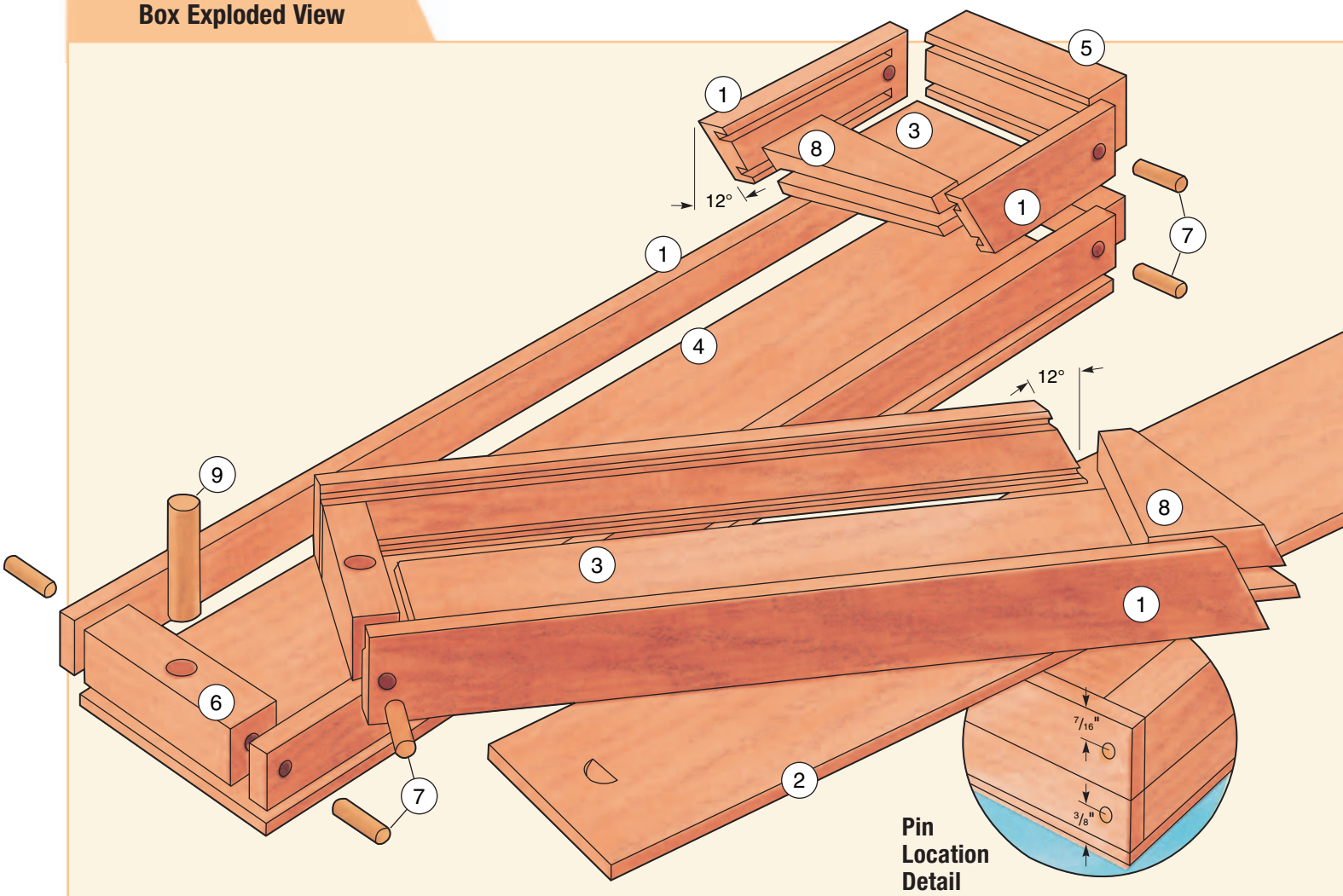
Gluing Up and Splitting Apart

Gluing up is really quite simple—just be sure to use the glue sparingly or it will run all over the inside of your box. Spread glue in the middle grooves of the sides and endwalls and on the ends of the endwalls. Slip the middle panel into the sides and add the endwalls, then, to help keep the assembly square, slide the top into place without glue. Next, spread glue on the bottom edges of the box, square up the assembly and clamp the bottom panel into position.

As the glue dries, drill two 1/8"-diameter x 1/2"-deep holes at each joint, as shown in the *Pin Location Detail* on the next page—be sure you avoid drilling into a groove. Cut short pins (pieces 7) and glue them into the holes to reinforce the weak butt joints. It will help prevent the sides from pulling away from the endwalls over time. Sand the dowels flush with the sides.

Now it's time to rip the box in half. Really, there isn't any mystery to this, but check your saw settings carefully to avoid cutting in the wrong place. Raise your table saw blade to cut through the box and clamp the fence 7/8" from the

Box Exploded View



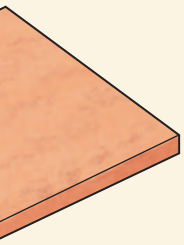
QuickTip

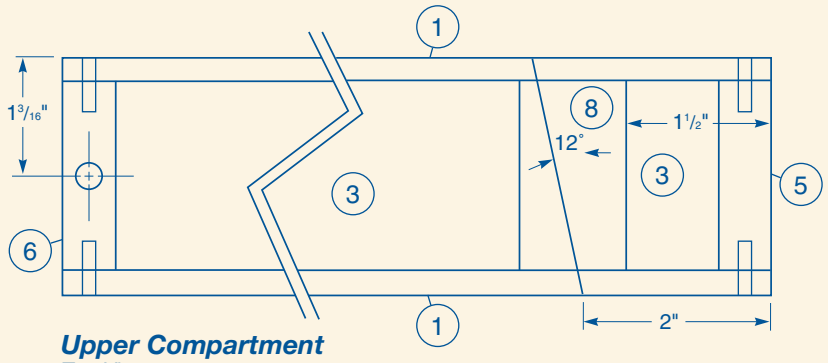
Non-slip Floors with Walnut Shells

If you have painted, wooden floors in your workshop, you know that a little sawdust makes for a dangerously slick surface. What you may not know is that boatbuilders use crushed walnut shells in their paint formulations to create non-skid decks. Pick up some from a local paint store and add it to a can of floor paint, according to the proportions listed on the container. The walnut shells will add just the right amount of grit to improve traction. In case you're wondering, you can't do this with sand because it sinks right to the bottom of the can. Walnut shells will remain suspended in the paint.

blade. With the top of the box riding against the fence, rip the box in two. (We've made allowances in the *Material List* for the loss of a 1/8" saw kerf.) Plane the edges to get a good fit, then cut a 5/16"-thick block for the divider (piece 8) and glue it into the upper compartment, as shown in the *Upper Compartment Drawing*, next page. Then stack the compartments and use a drill press to bore a 1/4" hole down through the back endwall to install the hinge dowel (piece 9).

Cut the hinge to length and glue it into the lower compartment. Trim the dowel flush with the bottom of the box, then lay out the compound angle cut in

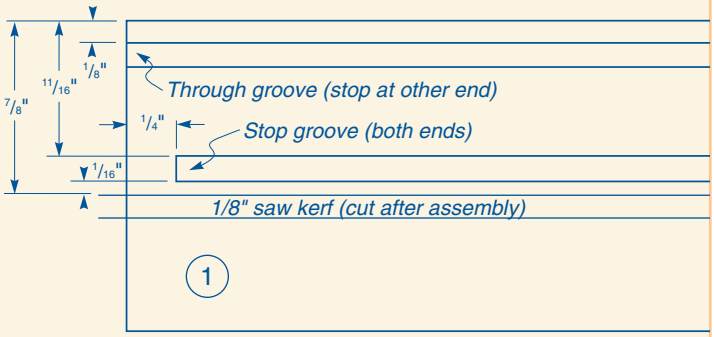




Upper Compartment
Top View

MATERIAL LIST

		T x W x L
1	Sides (2)	5/16" x 1 9/16" x 10"
2	Top (1)	1/8" x 2" x 12"
3	Middle Panel (1)	1/8" x 2" x 9¼"
4	Bottom Panel (1)	1/8" x 2¼" x 10"
5	Front Endwall (1)	1/2" x 1 9/16" x 1¾"
6	Back Endwall (1)	1/2" x 1 5/16" x 1¾"
7	Pins (8)	1/8" Dia. x 5/8"
8	Divider (1)	5/16" x 1¼" x 1¾"
9	Hinge (1)	1/4" Dia. x 1⅜"



Side Panel Groove Locations
Inside View

the upper compartment, as shown above. Tilt your band saw table 12° and turn your miter gauge 12°, then pass the upper compartment through the blade. When setting up this cut, try to achieve the correct angles, but realize that a little deviation won't matter in terms of how the top and bottom compartments seat together.

Stack the compartments again and you'll notice that, due to the saw kerf, the lower compartment is a little longer than the two upper sections combined. Glue the front part of the upper compartment to the lower compartment, then, after the glue dries, sand the ends flush.

Cut the top to length and chuck a 1/2" Forstner bit in your drill press. Tilt the drill press 25° and bore into the top just 1/16" to form the half-moon shaped finger pull.

Finishing Up

Apply a couple coats of oil finish to complete the pencil box. Once you've made it through your first box the next one will go much faster. This is such a fun project you'll no doubt make more.

Then fill it with a set of artist's pencils and give a special youngster a keepsake that will inspire memory.