

Layout: pencil vs. knife



FOR ACCURACY AND EFFICIENCY, YOU'LL NEED BOTH

BY CHRISTIAN BECKSVOORT

Pencils



Like any task in woodworking, accurate layout depends on using the right tool at the right time. It's easy to think that if a knife marks more precisely, it's better to always use a knife and never pick up a pencil. This isn't necessarily so.

The lines most critical to tightly mating joinery definitely should be made by a knife edge. But for marks that don't require hair-splitting precision, a pencil is quicker, easier to handle, and makes more visible lines.

The trick to being both accurate and efficient lies in knowing when to reach for each of these tools.

Draw your first lines with a pencil

I use a pencil when I make initial layout lines such as those for cutting case sides to length or

for locating dividers or doors. I also mark with a pencil in the first steps of laying out joinery such as dovetails or mortises. These are all lines to which something else eventually will be fitted, so the need for greatest accuracy will come later. In the meantime, a sharp pencil produces a clean, visible line more quickly and easily than a knife.

Pencil lines are also erasable. If you scribe your initial layout with a knife, you'll have to hit the line exactly when cutting or else spend time paring the waste to make the line disappear. If you miss a pencil line by a whisker, you can erase it and move on.

There are lots of pencils on the market, and you may wonder which to use. Regular pencils come in five degrees of hardness, from a No. 1, which is very soft and dark, to a No. 4, which is very hard and light. The softest pencils dull too quickly—a



Make your first marks with a pencil. Becksvoort cuts tails first when making dovetails, marking for the first cuts with a pencil (left). Pencil lines also are easy to see when locating shelves or dividers (above).

From top: A standard No. 2 pencil marks clearly and holds a point well. Avoid mechanical office pencils—the thin lead breaks easily. Mechanical drafting pencils use different grades of lead; look for one graded B or HB. White pencils, found at art-supply stores, are handy for use on dark woods.



Use a knife to mark out mating joinery. Becksvoort marks his dovetail pins by scribing the outline of the tails onto the pin board (above). After cutting a mortise in a table leg (right), he transfers the dimensions to the apron for the tenon.



Marking knives



From top: Some single-edged marking knives are beveled on only one side, meaning you'll need a left- and right-handed pair. A knife with two edges cuts in both directions. The author prefers a straight chip-carving knife, available at most woodworking-supply stores.

freshly sharpened No. 1 will lose its fine line almost immediately on harder woods, producing a $\frac{1}{16}$ -in.-wide line after just 6 in. to 10 in. of drawing. In most cases, your best bet for sharpness and visibility is the widely available No. 2, or the No. $2\frac{1}{2}$ pencil.

A wooden pencil's conical point can be modified to fit into a corner or trace along another board. Use 120- or 150-grit sandpaper to flatten the tip of the pencil so that the lead is shaped like a wedge or knife edge, instead of a point. For short distances, this works almost as well as a knife.

Mark with a knife when cutting to fit

Ultimately, the fit of a two-part joint depends on how precisely the second part is cut. Even a fine pencil line can be $\frac{1}{32}$ in. or wider. If all of your dovetails have that much slop, you'll have a disaster on your hands. That's why I switch to a knife for marking out the second part of such joints and for fitting dividers, backs, door parts, shelves, drawer parts, and moldings.

These knife lines also can serve to register the final cut with a chisel. However, make sure your first hit with the chisel is very light. A chisel is a wedge, and a very deep hit actually will relocate the line by as much as $\frac{1}{32}$ in.

There are a few things to keep in mind when using a knife: First, make your initial scribe mark very light so as not to follow the grain (this goes for end grain as well as face grain). Follow up with a second, heavier scribe mark. Also, be sure to keep

your knife flush against your pattern. When I'm using a square to scribe a line, I like to place my knife into the tick, then slide the square up to the knife blade and make the mark.

The most versatile marking knives can cut on both the right and left sides of a pattern, ruler, or straightedge. Some have spearpoint blades with two cutting edges; others have a single edge that is beveled on both sides. Still other blades have a single edge beveled on only one side.

Any of these edges can yield a tight scribe line. If your knife's edge is beveled on both sides, hold the bevel flat against your pattern or guide. If an edge has only one bevel, hold the back of the blade flat against the guide.

Avoid using knives with narrow bevels as layout tools. A very small bevel doesn't have enough surface area to be held securely against the guide, and if you hold the flat of the blade against the guide, the mark won't be accurate.

It helps to have a variety of layout knives handy, but if you want only one, go for a blade with two bevels. I prefer a straight chip-carving knife. The long bevels let me scribe tightly against either side of the work, and the slender blade reaches into narrow spots. I also can use the knife for its original purpose and save the price of a separate marking knife.

Finally, remember that a dull knife, like a dull pencil, will yield a wider line. Keep your knife as sharp as possible for a thin line, which also will require less physical effort. □