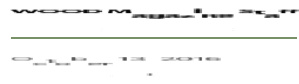




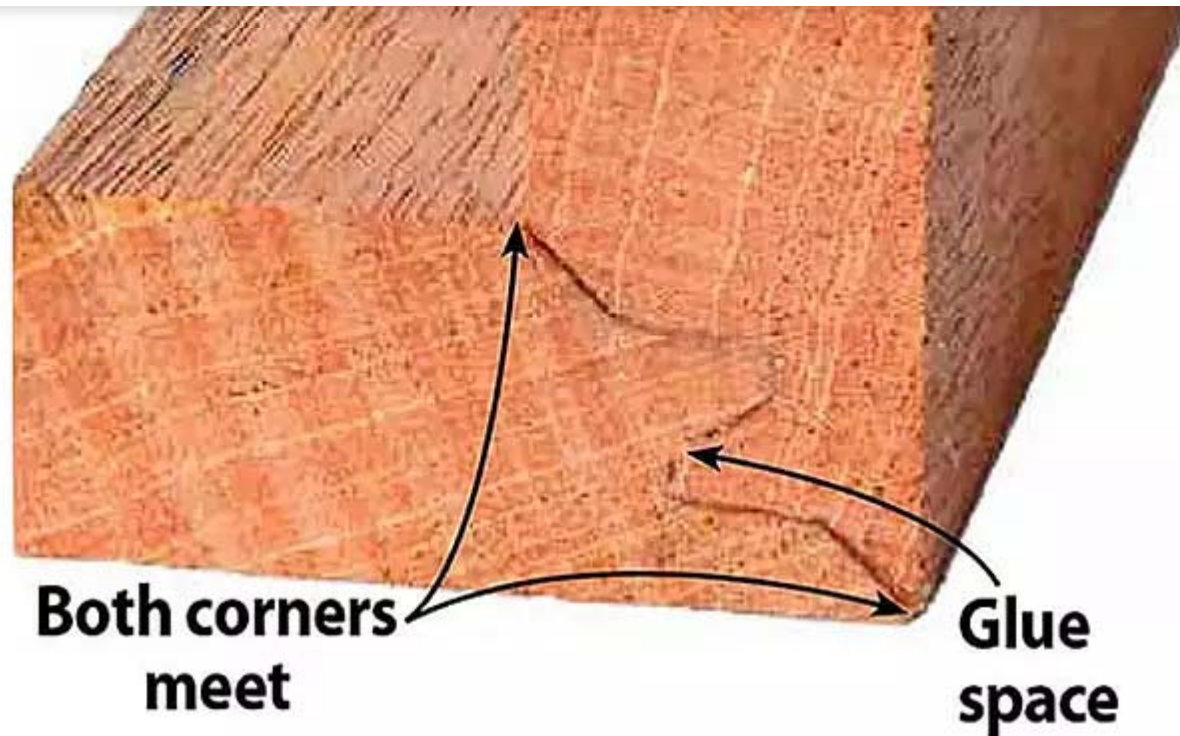
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Setting up a lock-miter bit

Here's a sure-fire method for setting up this bit.

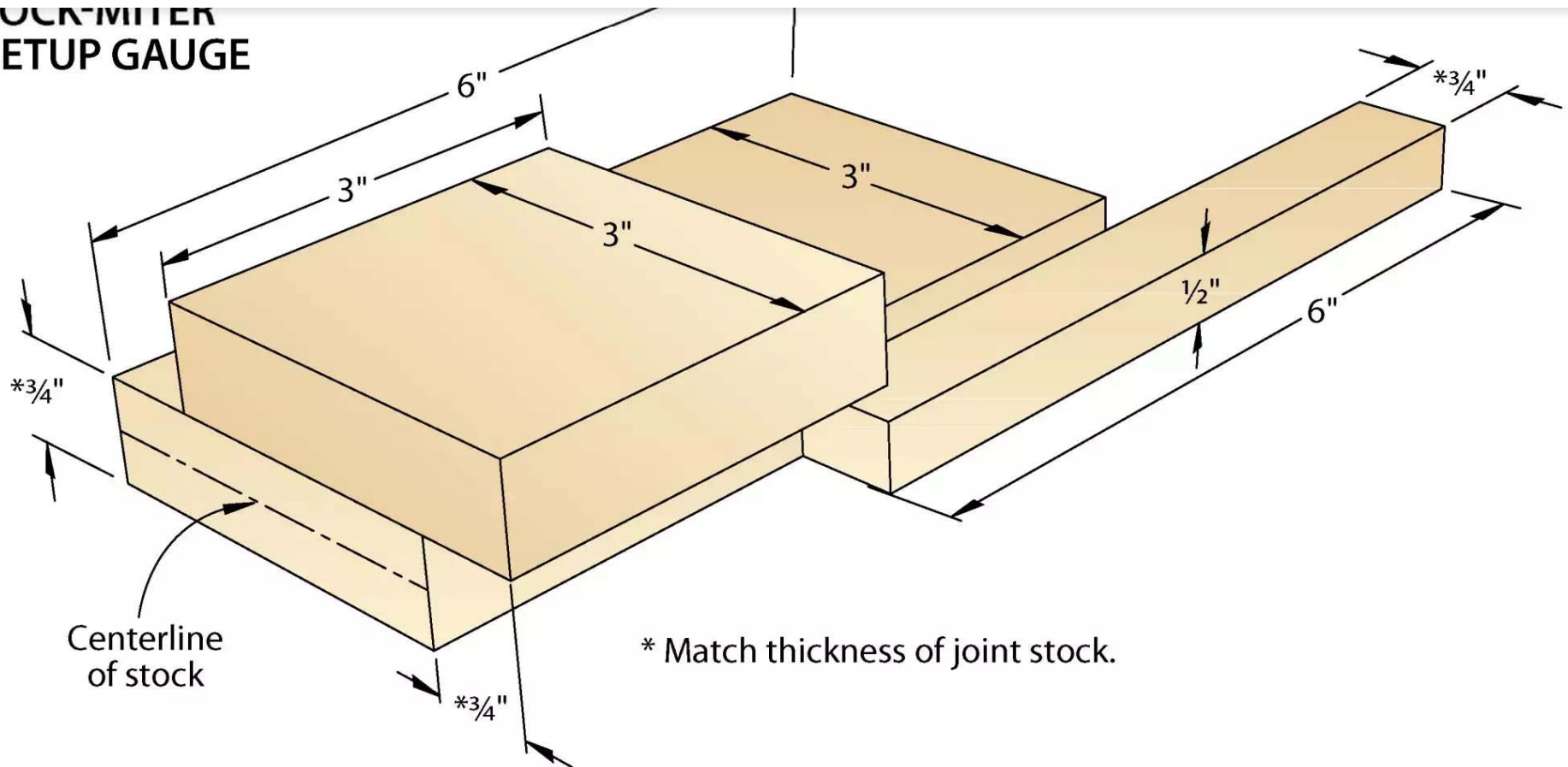


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Lock-miter joints have a lot going for them: appearance, self-alignment for easy assembly and clamping, and ample gluing surfaces for strength. They're ideal for right-angle corners of boxes, columns, cabinets, frames, and the like. Plus, you can cut both parts of the joint with a single router-table setup.

But getting the correct router-table setup—both the bit height and fence position have to be just right—can be a challenge. Here's a sure-fire method for setting up this bit.

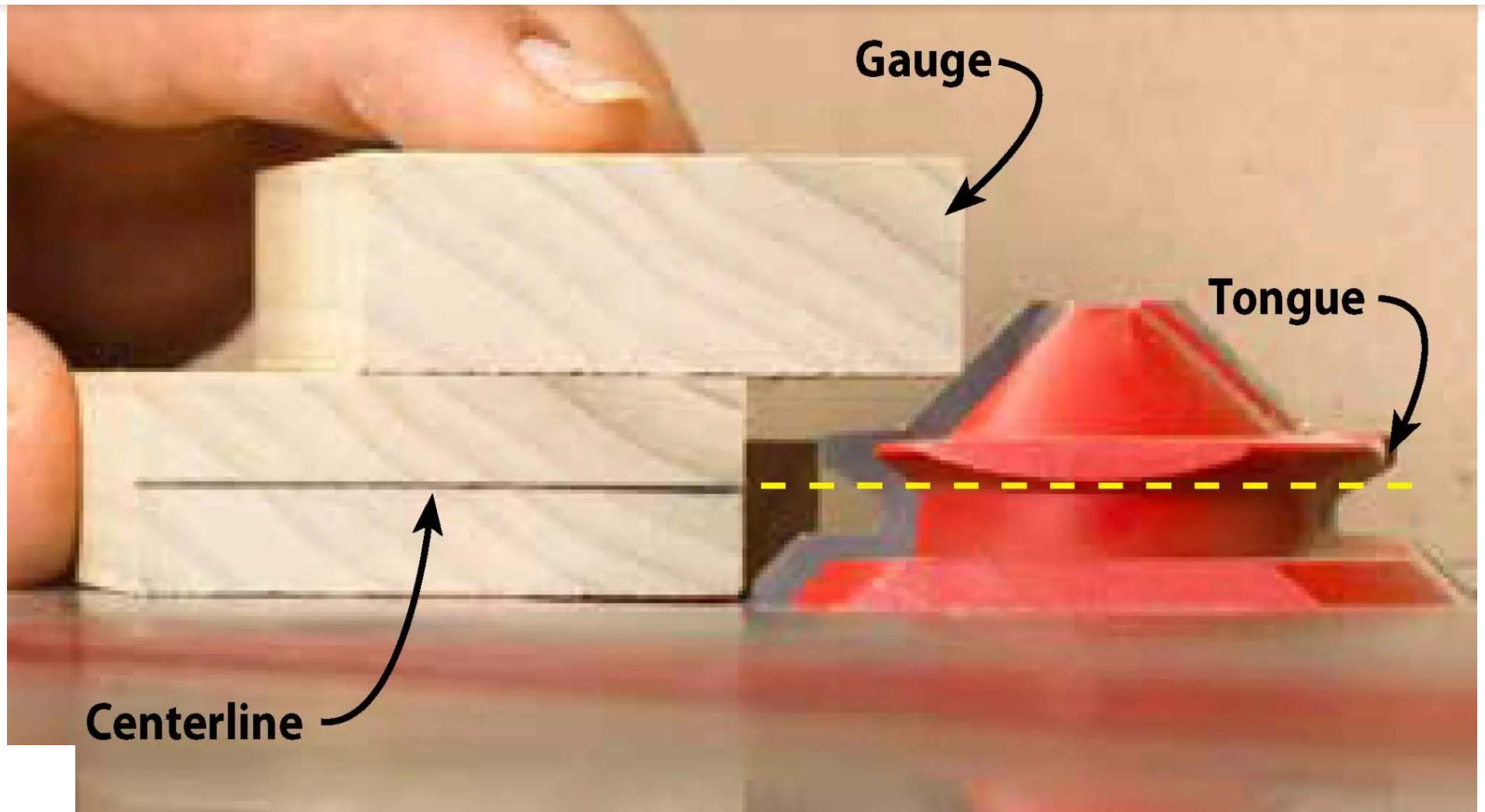
WOOD[®]**LOCK-MITER
SETUP GAUGE****Install the bit**

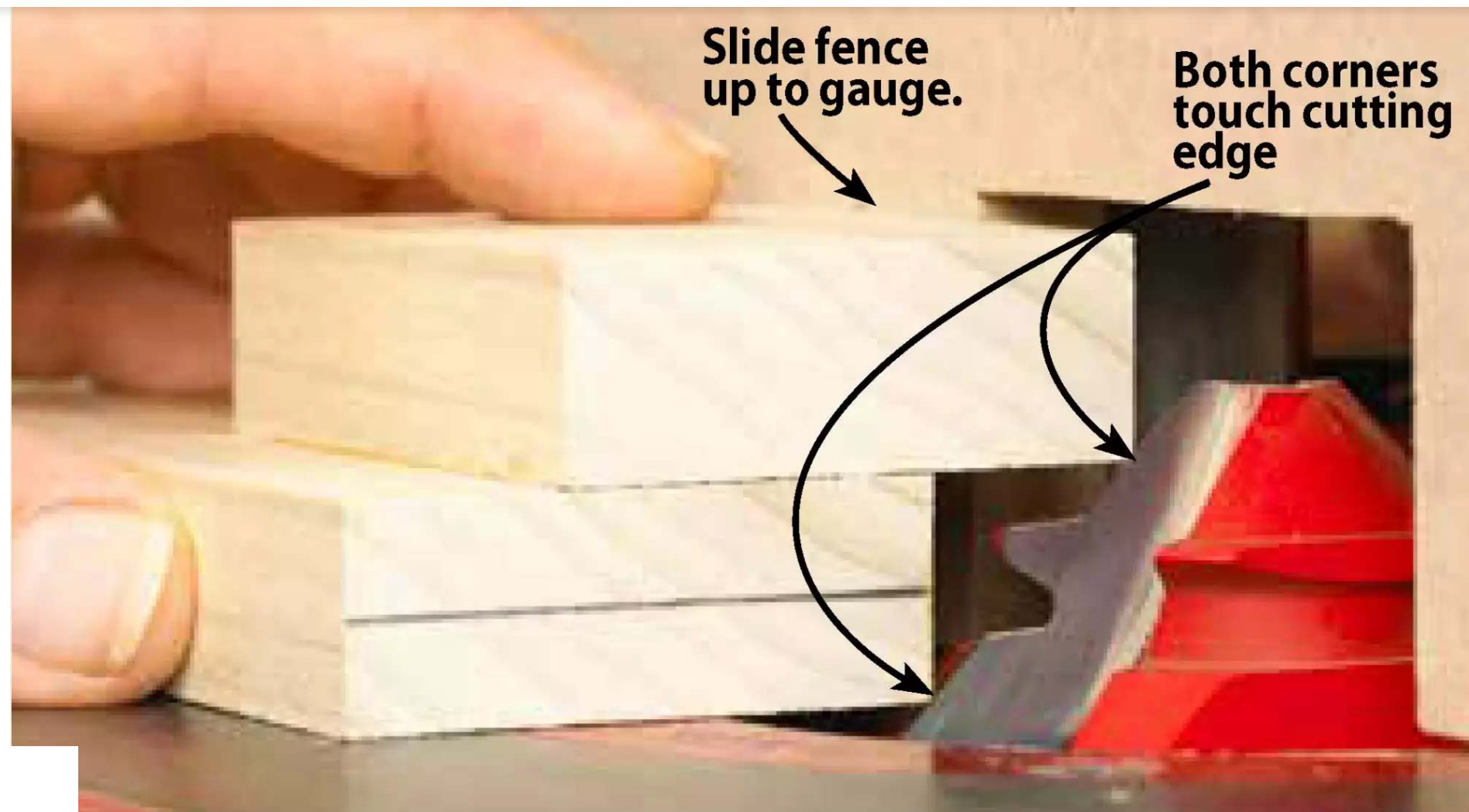
Lock-miter bits come in different sizes, covering different material-thickness ranges; choose one that works for the thickness of your stock. Install the bit in a table-mounted router, and set the router speed to 16,000 rpm for bits 1-1/4–2-1/4" in diameter or 12,000 rpm for bits 2-1/4–3-1/2" in diameter. (Follow the bit manufacturer's recommendation if it is different.) When

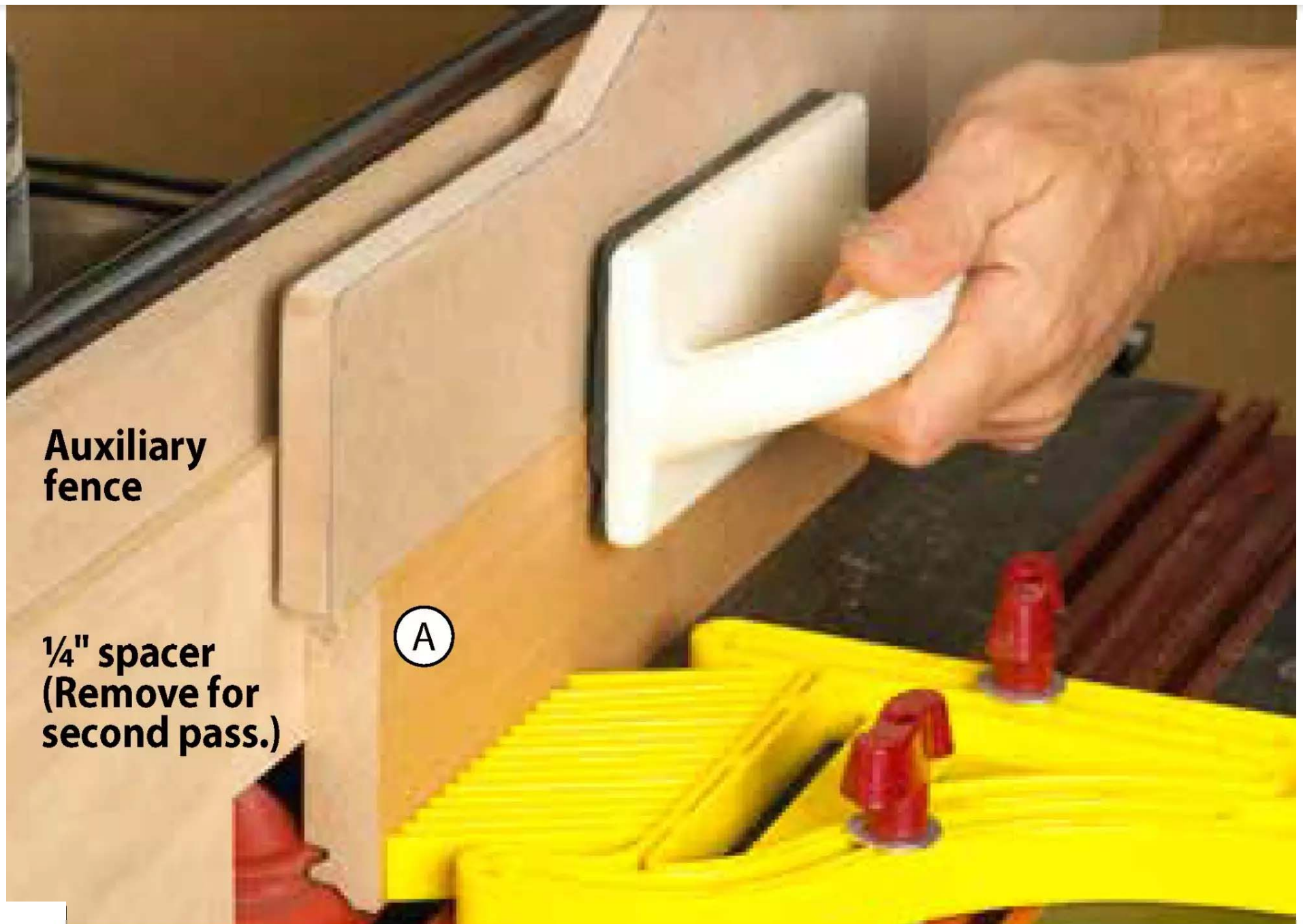


Now, make a simple gauge

From scrap stock the same thickness as the joint parts (both parts of the joint must be the same thickness), construct the lock-miter setup gauge (Drawing, above). Draw a centerline across the end of the bottom piece, and mark the material thickness on the gauge. Use it as shown as shown below.







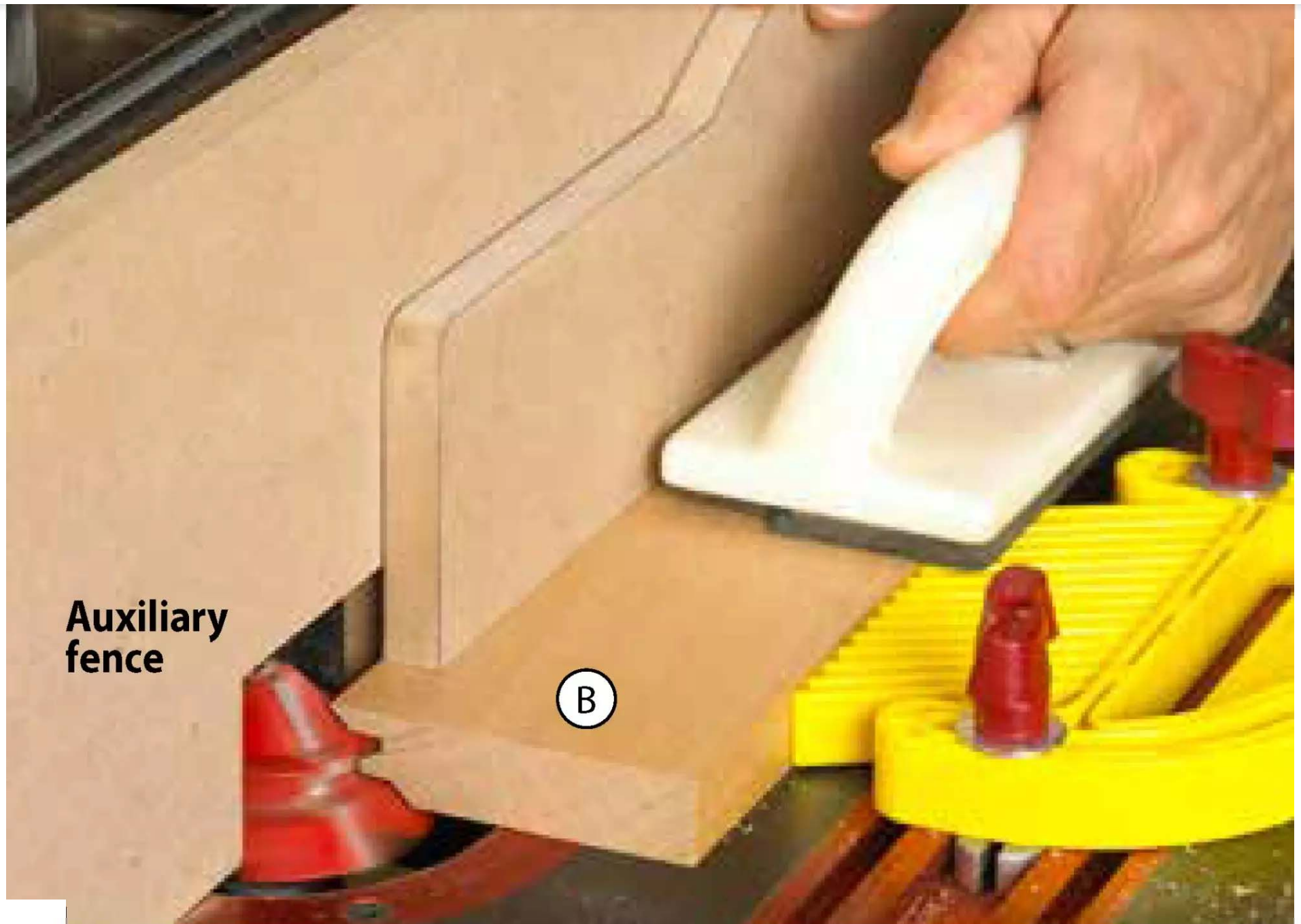
**Auxiliary
fence**

**1/4" spacer
(Remove for
second pass.)**

A



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**Auxiliary
fence**

B



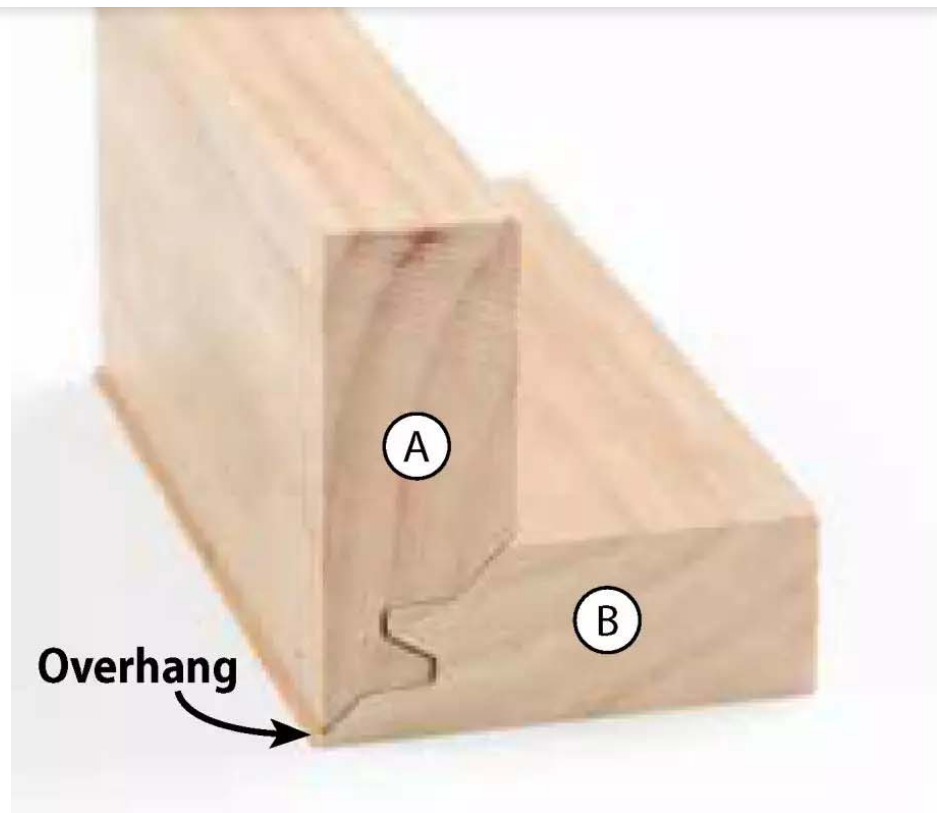
Cut a test joint

Rout both parts of the joint on scrap stock the same thickness as the work-pieces. For easier routing, make shallow cuts by starting with a spacer attached to the face of the router-table fence. (We clamped a 1/4" plywood spacer in place to rout the joints in 3/4" material). Make one pass with the spacer in place, and then remove it for the final pass.

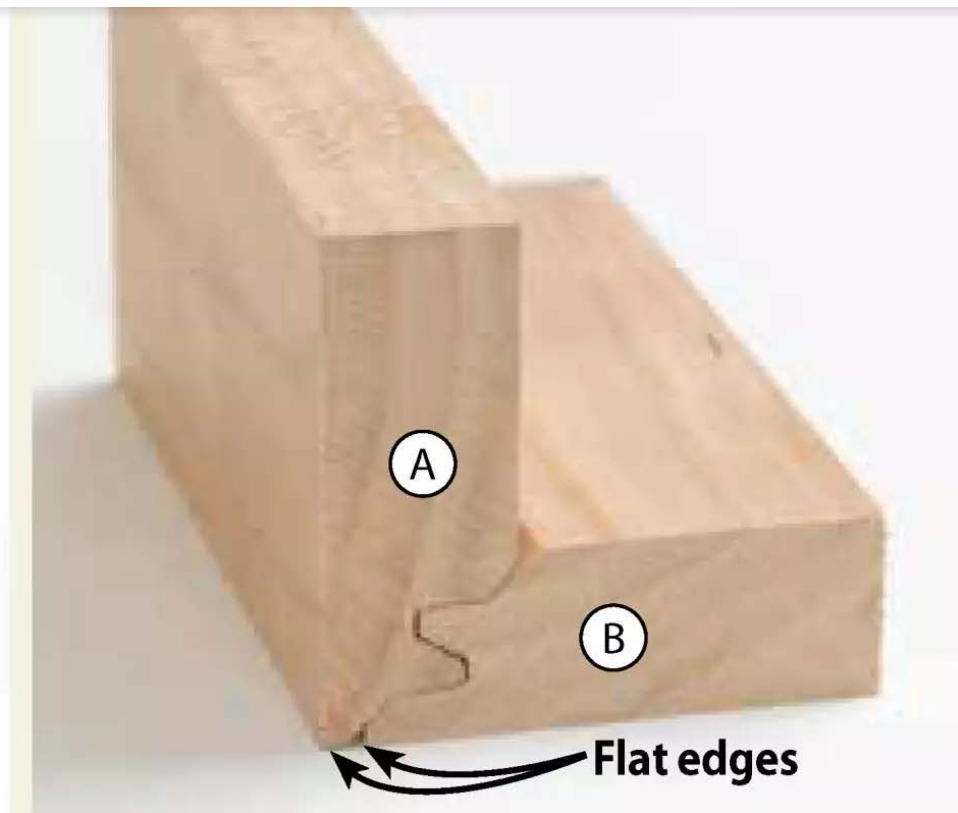
Rout one part of the joint (call it Part A) vertically (Photo A, above), with its inside face against the fence. Without changing the setup, rout the other part of the joint (Part B) flat on the table (Photo B, above) in two passes, with its inside face down.

[Faint, illegible text, likely a placeholder for a photo or diagram.]

After you cut the test pieces, assemble the test joint and compare it with the images below. Adjust the fence position or bit height, as indicated, in small increments. Cut additional test joints and make adjustments until the parts meet precisely, like the joint at the top of this page.

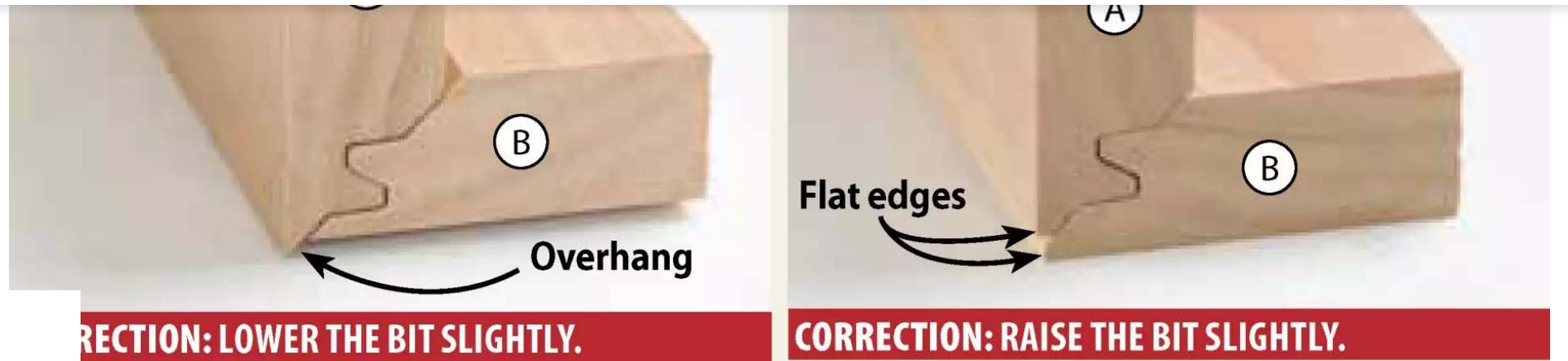


CORRECTION: MOVE FENCE FORWARD SLIGHTLY.



CORRECTION: MOVE FENCE BACKWARD SLIGHTLY.



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More resources

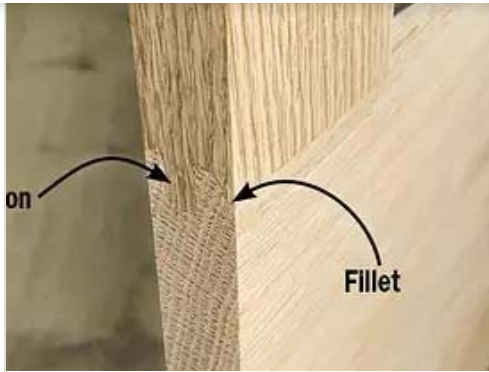
Learn more about special-duty bits:

Rabbeting bits with bearing sets: [woodmagazine.com/rabbeting-bits](#)

Clean-cutting spiral bits: woodmagazine.com/spiralbit

Perfect angles with bird's-mouth bits: [woodmagazine.com/birds-mouth-bits](#)

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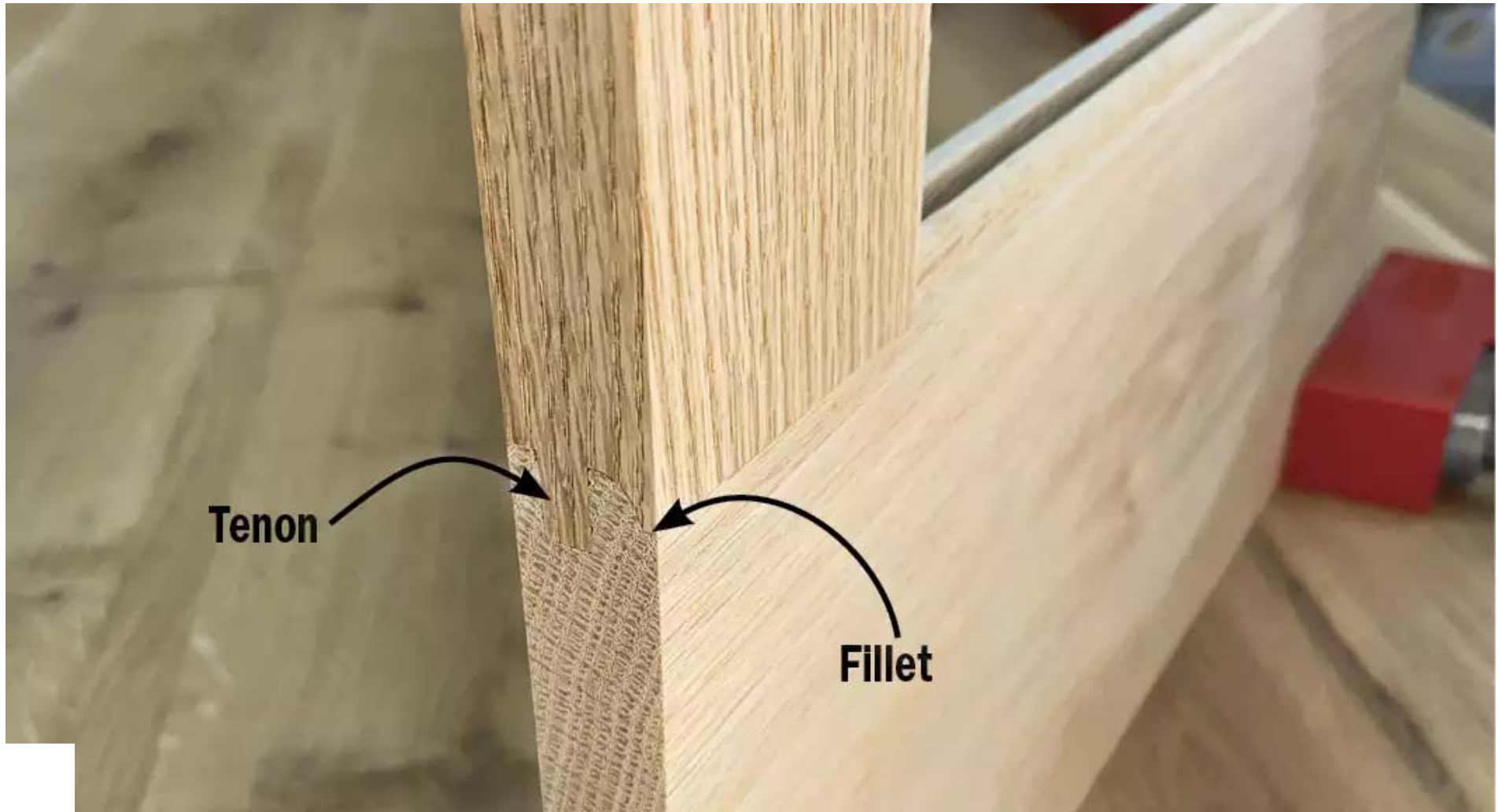


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Set up for Offset Rail-and-Stile Joinery

Cut crisp, strong rail-and-stile joinery with router bits.



Cut crisp, strong rail-and-stile joinery with router bits [**Sources**]. One bit simultaneously cuts a groove for a panel and a handsome profile along the rail and stile edges. The other bit machines a tenon on the rail ends while coping them to mate with the stiles. Instead of







