I prefer to cut crown in position rather than lying flat, so I made a jig for this otherwise dangerous job. If you like to cut crown molding on-the-flat, you don’t need a jig like this, as most crown joints, even acute corners, can be cut in a compound miter saw with the material lying flat. (If the corner measures 45°, for instance, then the miter is 56° and the bevel is 46 3/4°, well within the limits of many compound miter saws.) But for cutting acute angles with the material in position, you must use a jig, you must clamp the jig to the fence on your saw, and you must clamp the molding to the jig.

I’ve made two jigs—really they’re accessory fences—that clamp to the fence on my miter saw. I built the fences 4 1/4 in. tall because that’s the maximum depth of cut on my Bosch 12-in. SCM saw. Each fence is at a 45° angle to the standard metal fence on my saw. Any material will work; I used 3/4-in. hardwood, 4 1/4 in. wide and 12 in. long for the rear support, 16 in. long for the front fence. The exact length of the two pieces isn’t critical, though I did cut the rear support so that when it’s flush with the far end of the existing fence, the jig is positioned perfectly in my saw.

I cut one end of each piece at a 45° angle, then fastened them together, forming a large 45° angle (Fig. 1). Because the crown molding projects from the front of the miter saw at a 45° angle and therefore doesn’t have very much base support, I also attached a piece of 1/4-in. plywood to the bottom of the jig, using glue and staples. Before fastening the plywood permanently, I placed a speed square inside the jig to be sure it was at a perfect 45° angle (Fig. 2). I rein-

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**Making an Acute Angle Jig**

Gary Katz

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**Figure 1.** Rip the pieces for your accessory fence so they’ll fit your saw’s maximum depth of cut, then miter one end on each piece before fastening the fence together.

**Figure 2.** To support the molding when it’s projecting out from the saw, install a 1/4-in. plywood base to the fence. Be sure the fence is adjusted to a perfect 45° angle before fastening the base with glue and staples.
forced the angle with a third length of wood, glued and nailed to the rear support, front fence, and plywood base (Fig. 3).

Position the jig on your saw so the blade won’t cut off the corner of the jig, then mark a line on the rear support flush with the far end of the miter-saw fence. Cut the rear support off at that line, and you’ll be able quickly to attach the fence in the right location every time (Fig. 4).

In use, the base of the accessory fence is trimmed during the first cut, but there’s still plenty of base left to secure a clamp to. Remember, when you use this jig, always use clamps. If you rely on the “death grip” to secure your material in this jig, you could lose your whole hand. Always clamp the jig to the miter-saw fence, and clamp the material to the jig (Fig. 5).

Figure 3. For vertical support, add blocks or a length of stock from the backboard to the front fence. Check that all pieces are perfectly vertical before fastening the support.

Figure 4. Position the jig, and cut the rear support flush with the end or your miter-saw fence, so you’ll be able quickly to attach the fence in the right location every time.

Figure 5. In use, the jig must be clamped to the saw and the material must be clamped to the jig. Cutting crown in position, I double-clamp the material.