# Versatile Cut-off Saw

by Clayton DeKorne

*Hitachi's new saw is safer and more portable than a radial arm saw and more versatile than a miter saw.*

Roof framers and finish carpenters alike can profit from using the Hitache Slide Compound Saw. It is a cross between a miter saw and a radial arm saw and it lends the advantages of both. It can cut simple miters in wider stock than most 15-inch miter saws can. And, as the name implies, it can cut compound angles, simplifying cheek cuts and crown miters. The maximum cutting dimensions may be smaller than most radial arm saws (2 9/16 x 12 inches for a straight cut; 1 3/4 x 8 3/8 inches for a 45/45 compound cut). But, practically speaking, the Slide Compound Saw will still cut a cheek cut on a 2x8 hip jack for a 12/12 pitch roof. And, at 38 pounds, this saw is more portable than any radial arm saw or even a Delta Sawbuck.

***Swivel and slide with safety.*** Unlike a radial arm saw, the Hitachi Slide Compound Saw cuts on the push. The motor and an 8 1/2-inch blade are mounted on two parallel bars that slide back and forth. But, like a conventional cut-off saw, the blade can pivot up and down. For cutting small pieces, the sliding mechanism can be secured so the saw can only pivot up and down, plunging in and out of each cut. For cutting wide pieces, the blade is pulled forward (with the blade guard still covering the blade) and then pushed down and back to make the cut. The action is very smooth and it doesn't take long to get accustomed to this unusual cutting motion.

The push design is primarily a safety feature. Radial arm saws that cut on the pull are notorious for taking off fingers, since it is so easy to slip a digit across the path of the blade. Kickbacks can be especially dangerous with radial arm saws because the saw itself can lurch towards you if the blade gets jammed. While caution must be exercised with all power tools, Hitachi's design makes these hazards easier to avoid.

Miter angles are adjusted by moving the saw on a turntable to the right and left as with a conventional miter saw. The turntable has positive stops at 0, 15, 22.5, 30, and 45 degrees. Bevel angles are easily adjusted by loosening a clamp lever at the back of the sliding arm. The saw can then swivel to the left through an arc up to 47 degrees. The turntable is asymmetrical—0 to 45 degrees to the left and 0 to 57 degrees to the right—to provide room for the saw to swivel over for compound cuts.

***Performance.*** To evaluate the performance of the Hitachi Slide Compound Saw, I used it to build two right-angled gable-end vents to match the slope of an 8/12 roof. Ordinarily the time to make neat-fitting compound angles for the louvers would have justified the cost of special ordering these. Yet the Hitache Slide Compound Saw made efficient work out of these. A 47-degree bevel and a 30-degree miter were sufficient to match the slope of the triangle with slanting louvers. To match the roof pitch, I needed to make 35-degree and 55-degree bevel cuts for the 1x4 jamb. By securing the slide mechanism, I was able to cut both angles as miters with the boards on edge (the 35-degree bevel could have been cut as a straight bevel, as well). This versatility convinced me that the Slide Compound Saw could replace my conventional miter saw on the job site. You might occasionally want a larger miter saw for mitering bigger stock on edge, but not very often.

For roof framing, this saw comes into its own by simplifying cheek cuts and making plumb cuts in large framing material. Plumb cuts are marked on a grade scale on the turntable along with the miter degree scale. The grade scale shows these slopes in base 10 (metric), which is not the way most of us think in this country. This may prove to be a benefit, however, as innovations from abroad gain ground and the metric system takes hold. In the meantime we can continue to read the degree markings on our speed squares instead.

Of the various cut-off saw options on the market, the Hitachi Slide Compound Saw would be my choice for use on all construction sites. Although the suggested retail is $700, I've seen it discounted to as little as $490. This is more expensive than other 8 1/2-inch miter saws, a bit more than most 15-inch miter saws, and competitively priced with most radial arm saws. Yet of all these, it provides the most versatile performance. ■