

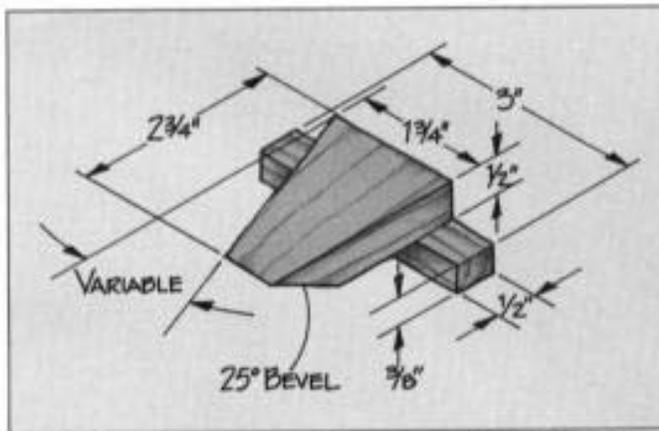
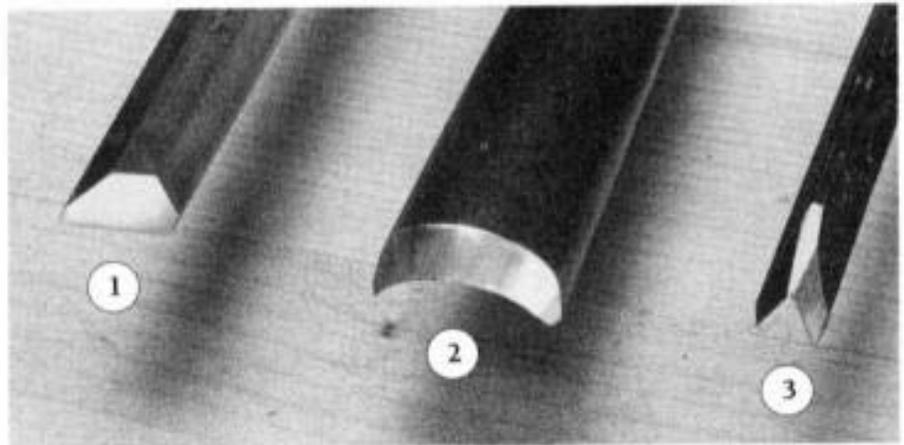
## SHARPENING SKEW CHISELS, GOUGES, AND V-TOOLS

Because the blades of skews, gouges, and V-tools are more complex in shape than those of flat chisels and plane irons, it's more difficult to grind them. (SEE FIGURE 5-1.) You must devise some method of holding these blades at the proper angle to the stone or the abrasive.

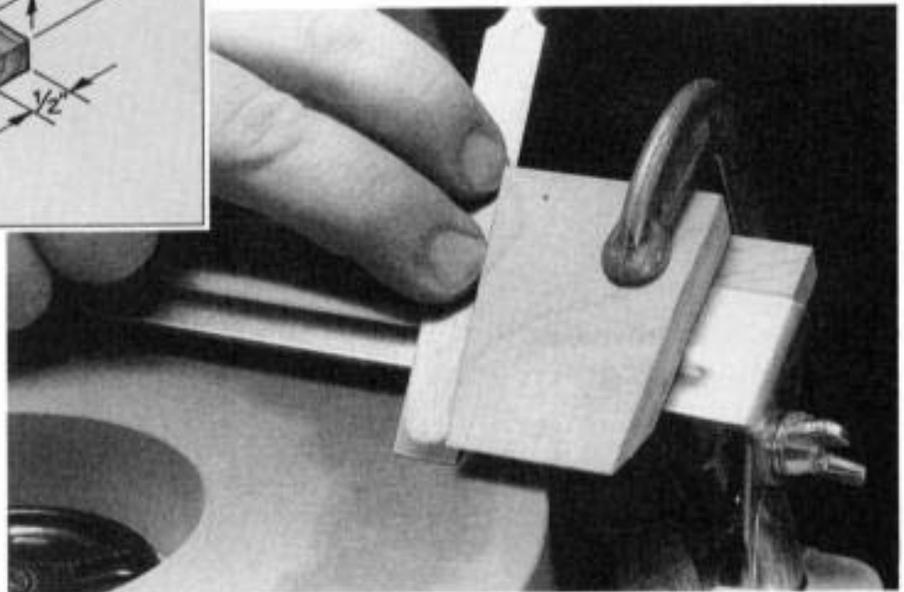
When working on a sharpening machine, you can easily create specially shaped guide blocks for all but the most complex tools and attach them to the tool

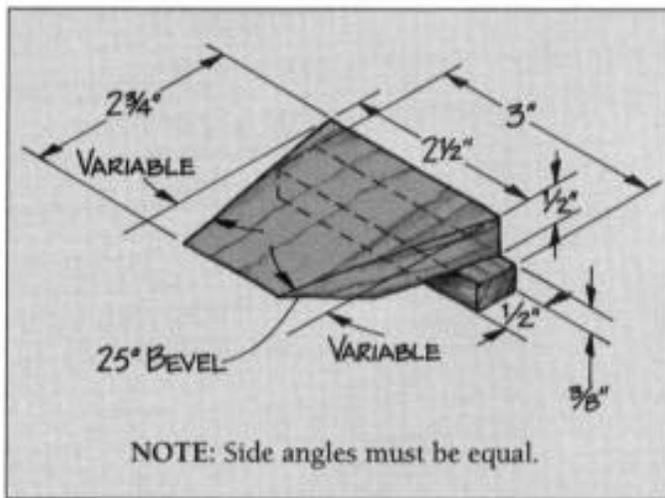
rest. Use an angled block for skew chisels — set the bevel by tilting the tool rest, and create the skew by guiding the chisel along the angled side. (SEE FIGURES 5-2 AND 5-3.) Make a V-block for gouges, and keep the blade pressed against the sides of the V as you rotate the cutting edge. (SEE FIGURE 5-4.) Use a trapezoid block for V-tools, and guide the blade along the angled sides when grinding the two separate cutting edges. (SEE FIGURE 5-5.)

**5-1** When sharpening cutting edges with complex shapes, you face the same problem as when sharpening ordinary chisels and plane irons — how do you hold them at the proper angle to the abrasive as you grind? A *skew chisel* (1) must be held at a complex angle to grind the bevel and the skew. A *gouge* (2) must be rolled from side to side as it's ground to follow the curve of the cutting edge. And both sides of a *V-tool* (3) must be ground precisely the same.

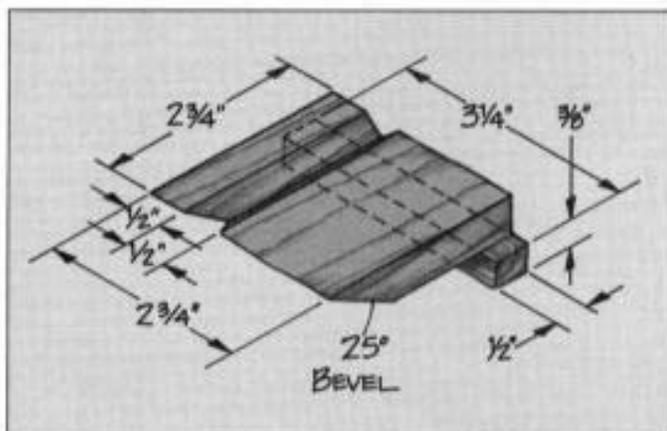
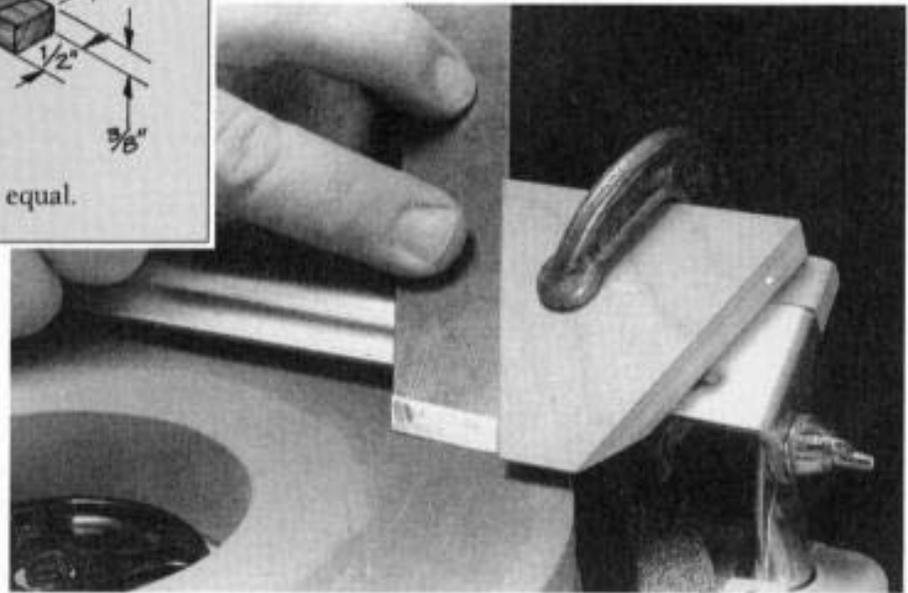


**5-2** When machine sharpening a skew chisel with a single bevel, make a guide block with one angled side, as shown. Clamp this to the tool rest. Hold the side of the chisel against the angled side as you grind the bevel. The angle of the tool rest controls the bevel angle, and the angled side of the block controls the skew angle.





**5-3** When machine sharpening a skew chisel with a double bevel (such as a lathe skew), make a guide block in the shape of a trapezoid with two equal sides and angles. Hold the skew against one of the equal sides when grinding one bevel, then turn it over and hold it against the other equal side to grind the second bevel.



**5-4** To grind the curved edge of a gouge, make a guide block with a V-groove, as shown. Rest the blade of the gouge in the V and hold it there as you roll the tool. Press the tool forward gently to keep the cutting edge against the abrasive as the gouge rolls.

