

Bench Grinder Sharpening Jig Instructions

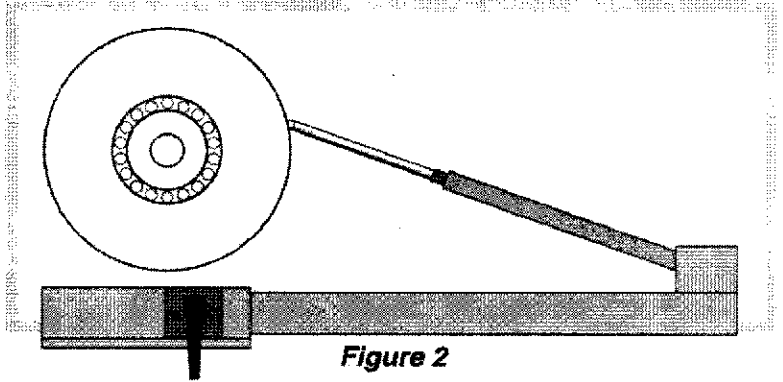
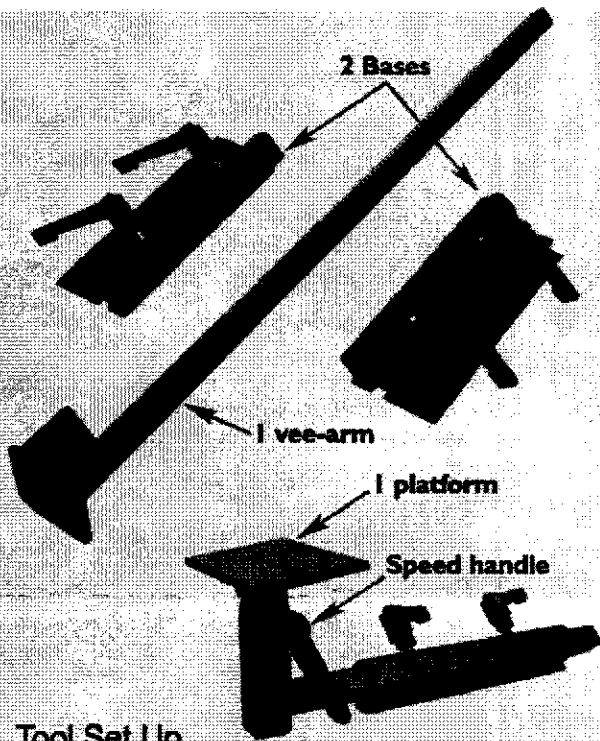


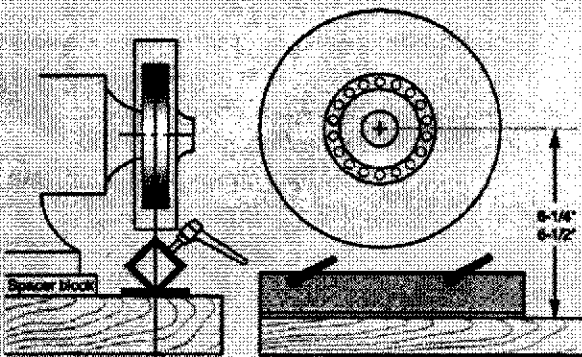
Figure 2

The v-arm is used to sharpen bowl gouges, roughing gouges and skewers. With the grinder off, slide the V-arm into one of the mounts. Place the handle of the tool to be sharpened into the V. arm. Slide the arm toward the wheel with the chisel end resting on the wheel until the bevel of the chisel matches the wheel surface. Lock the arm. Lift the chisel off the wheel and turn on the grinder. Lower the chisel until it just touches the wheel. Lift it again to look at the mark you just made on the chisel. If it matches the bevel to your liking, continue to sharpen the chisel as needed. If not, adjust the arm in or out of the base until you get the angle you want. Keep the tool cool by dipping the end in water frequently. Bowl gouges must be rotated left and right as you grind the edge (Figure 2). How far to grind the sides back is a personal preference. Most people go back 10 to 20 degrees with a 45 degree bevel. (Figure 3)



Tool Set Up

Set up of your new jig is the most important thing you can do for sharpening success. Choose a location on your bench or a heavy portable mounting board. The mounts must be centered directly under the grinding wheels. Remove any rubber feet from under the grinder. If you find the grinding wheel or guard to be too low and contacting the mounts, put a spacer under the grinder, raising it to the minimum height of 6-1/4" from base to grinder arbor.



Fasten each base even with the front of the wheel.

The front of the mounting board or bench must be less than 1/2" ahead of the base.

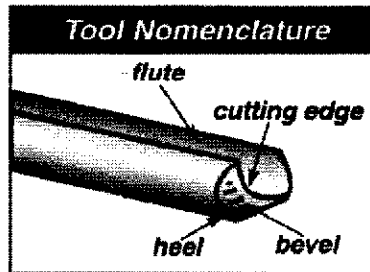
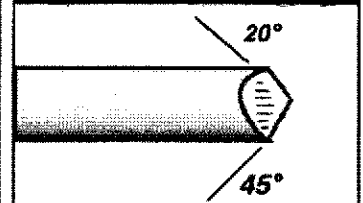
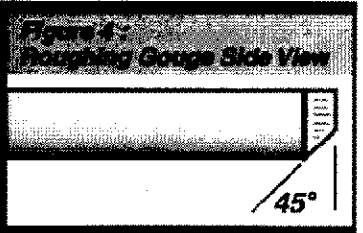


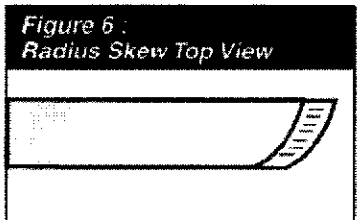
Figure 3 :
Bowl gouge side view



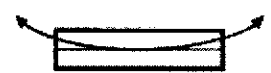
Roughing gouges are sharpened similarly to the bowl gouge but the sides are not sharpened back. They remain square after the sharpening process. Roughing gouges usually have a 45 degree bevel.



Skewers are sharpened on both sides so care must be taken to sharpen both sides evenly. If you wish to have the rounded skew grind, use the platform first to create the radius.

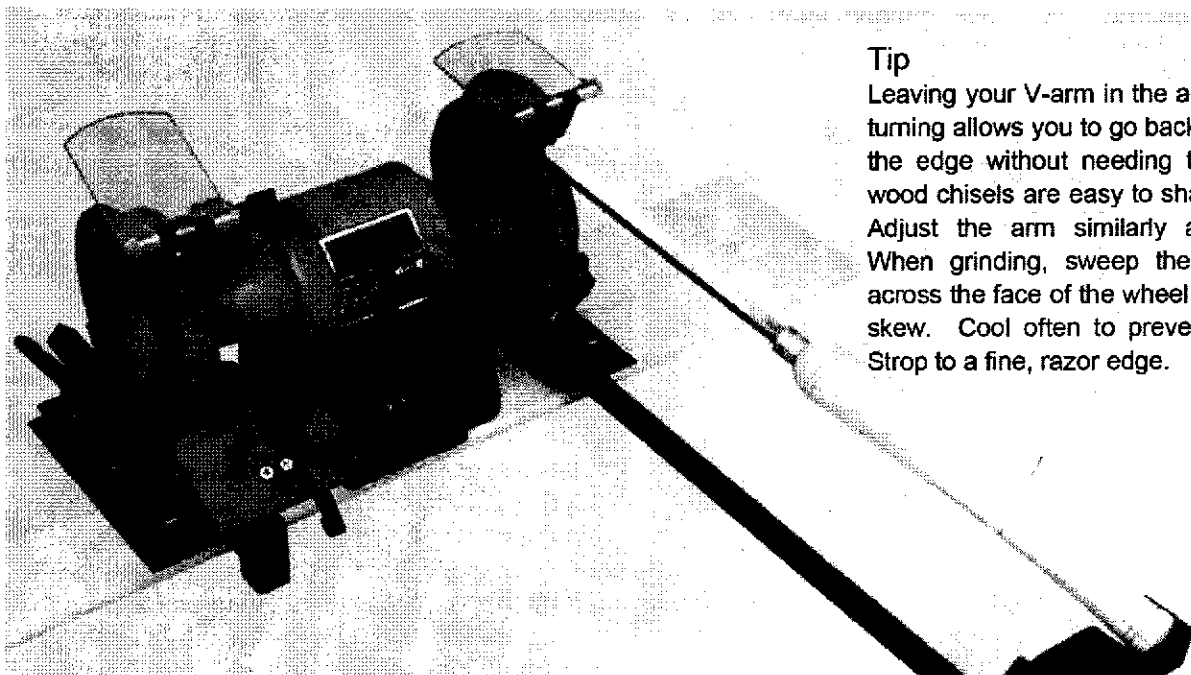


Then go to the V-arm and grind the bevel by making a sweeping motion with the chisel across the face of the wheel. Flip from side to side often to maintain a balanced grind and don't forget to keep it cool by dipping in water frequently.



End view of cutting edge of radius skew. Arrow shows motion skew must make on grinding wheel to grind this profile.

The skew can be brought to a razor edge with a strop after completing the grind.



Tip

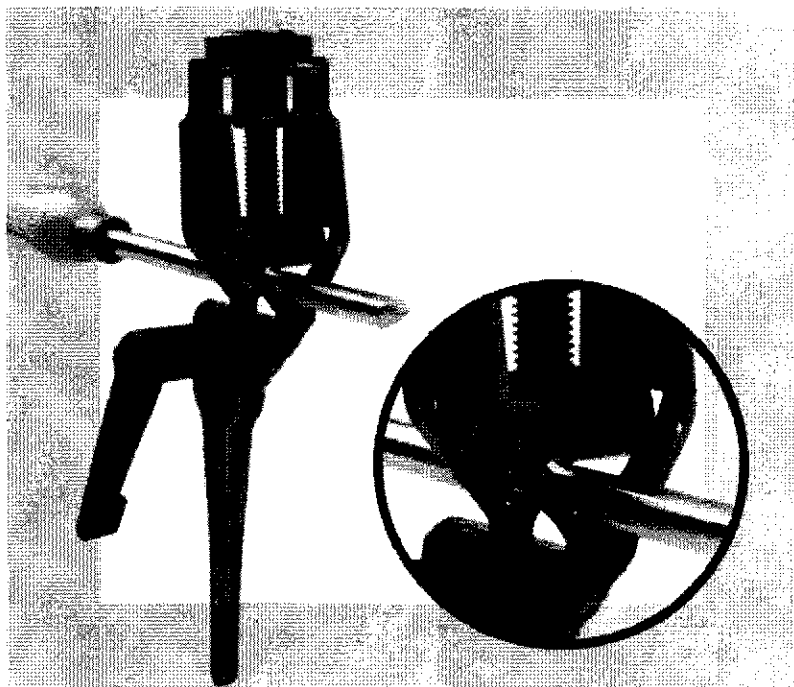
Leaving your V-arm in the adjusted position while turning allows you to go back to it and re-establish the edge without needing to re-adjust. Normal wood chisels are easy to sharpen with the V-arm. Adjust the arm similarly as described above. When grinding, sweep the chisel side to side across the face of the wheel just as you do for the skew. Cool often to prevent burning the edge. Strop to a fine, razor edge.



Platform

The platform slides into the mount similar to the V-arm. Release the tilt locking lever and proceed to slide the platform in or out of the mount while tilting it to establish the needed angle and platform distance to the wheel. Lock both the mount and the tilt lever. The platform is perfect for scraper sharpening. Set the tilt to match the bevel on the scraper to the wheel. Then sweep the scraper handle as necessary to match the scraper profile to the face of the wheel.

3-V Skew base
The 3-V skew base allows you to sharpen your skews more accurately by offsetting the handle of the skew left or right. This more closely matches the angled end of the skew grind to the wheel. The skew base attaches to the V-arm with a single thumb screw making it easy to put on and off.



Versa-Grind

The Versa-grind allows you to make the fingernail grind, bowl gouge grind and the side (Irish) grind with ease and repeatability. The adjustable angle arm of the Versa-Grind changes the center of rotation of the gouge so that the sides of the gouge get much more exposure to the grinding wheel. Place the end of the arm in the V of the V-arm. With the gouge inserted into the Versa-Grind, adjust the angle of the arm and sweep through the motion of the grind with the grinder off. Once you have the correct angle, lock the arm of the Versa-Grind and proceed to sharpen the tool. You will find that a 1-1/2" protrusion of the chisel through the Versa-Grind is about right for best results.