THE ELLSWORTH SHARPENING JIG

***Recommended for use only with 5/8" or 1/2" diameter bowl gouges with
parabolic-shaped flutes.

***When using this jig with the Wolverine sliding arm, change the 2", 4", 7"
measurements listed below to: 2 1/8", 5 ¼" 7 1/8" respectively. Maintain a
60-degree bevel angle on the end of the tool, measured from the base up.

Setting up the Slide: See drawings included.

a – Make 'slide' from any board; ¾" thick, 2" wide and about 15" long. Cut slot
approximately 7/16" wide to clear the 3/8" diameter carriage bolt. Cut notch in 'basket'
to receive tip of the jig's aluminum leg.

b – Position slide on the bench parallel to the plane of the wheel and directly below it.

c – Pivot point must be 4" below the center hole of the wheel and 7" from face of wheel
measured on a vertical plane. Maintain this 7" distance as wheel wears. 6" grinders may
have to be blocked up slightly to achieve this 4" distance.

d – Drill 3/8" diameter hole through bench top to receive 3/8" diameter carriage bolt. Be
sure this hole is below the centerline of the wheel, not off to one side.

Using the Jig: Before you begin, turn the grinder **"OFF"**.

a – Slip gouge into jig, flute pointed up, so that the tip protrudes 2" from the front
   of the jig. Tighten set screw.

b – Position tip of jig's aluminum leg into pivot point (basket) of sliding arm. With
grinder turned "off", sweep the gouge a gull 90 degrees left and right to ensure tip of the
leg does not slip out of the basket. Adjust notch if necessary.

c –Hold the jig lightly but firmly with finger tips of **BOTH** hands. **DO NOT HOLD
THE GOUGE**, as this will cause you to over-grind the sides of the tool. Practice the
movements required to sharpen the gouge without the grinder running. Try to prevent any
tension building in the hands or wrists that would cause you to over-grind the gouge.

d – Turn the grinder on and begin sharpening from the base of the bevel on one side to
the tip, then the base of the bevel on the other side to the tip. Blend at the tip if necessary.