

DRILL GRINDING JIG

CAPACITY $\frac{1}{8}$ " - $\frac{3}{4}$ "

For average conditions, a 12° clearance angle at the Drill periphery, is most suitable; and a line drawn across web, will be at an angle of 130° to the cutting edge, the point angle of the Drill, should suit the material being drilled.

The Jig has a scale of 5 included angles:—

88° suits thin sheet, hard materials and counter sinking wood.

68° suits drills $\frac{1}{4}$ " and smaller.

59° suits general purposes.

49° suits very soft materials.

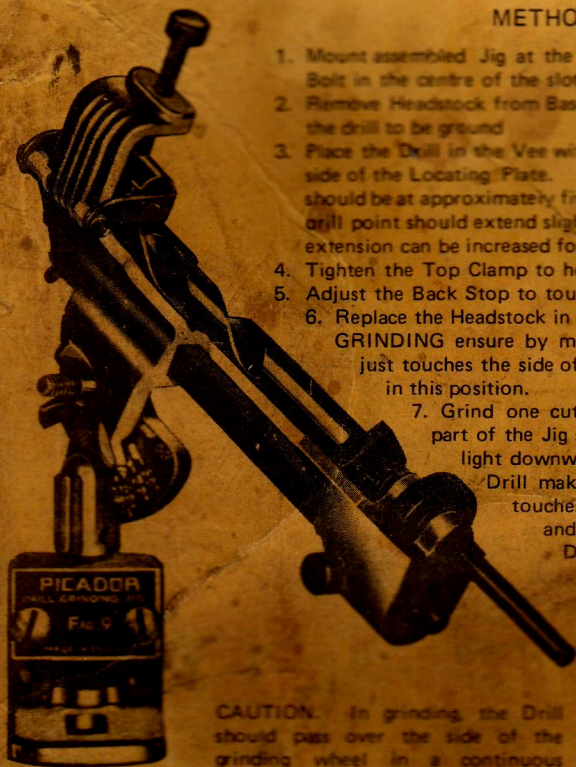
30° suits drilling wood, ebonite, Formica and counter sinking metal.



METHOD OF USE

1. Mount assembled Jig at the side of the Grinding Wheel. Fixing Bolt in the centre of the slot.
2. Remove Headstock from Base. Adjust the Jig to suit the angle of the drill to be ground.
3. Place the Drill in the Vee with the lower flute edge touching the side of the Locating Plate. In this position the cutting edges should be at approximately five minutes to five on the clock. The drill point should extend slightly beyond the tip, say $\frac{1}{16}$ ". This extension can be increased for Drills $\frac{1}{4}$ " and larger.
4. Tighten the Top Clamp to hold the Drill in position.
5. Adjust the Back Stop to touch the end of the Drill Shank.
6. Replace the Headstock in the Base. BEFORE COMMENCING GRINDING ensure by moving the Base that the Drill only just touches the side of the Grinding Wheel. Lock the Base in this position.

7. Grind one cutting edge by swinging the moving part of the Jig side to side at the same time apply light downward pressure to the tail. Reverse the Drill making sure that the lower flute edge touches the side of the Locating Plate, and then grind the other cutting edge. Do NOT alter the Back Stop between grinding each side.



CAUTION. In grinding, the Drill should pass over the side of the grinding wheel in a continuous motion, removing not over 0.003" to 0.005" at a time, and not be allowed to dwell at any one point. All Drill grinding must be done on the side of the wheel not the periphery.

