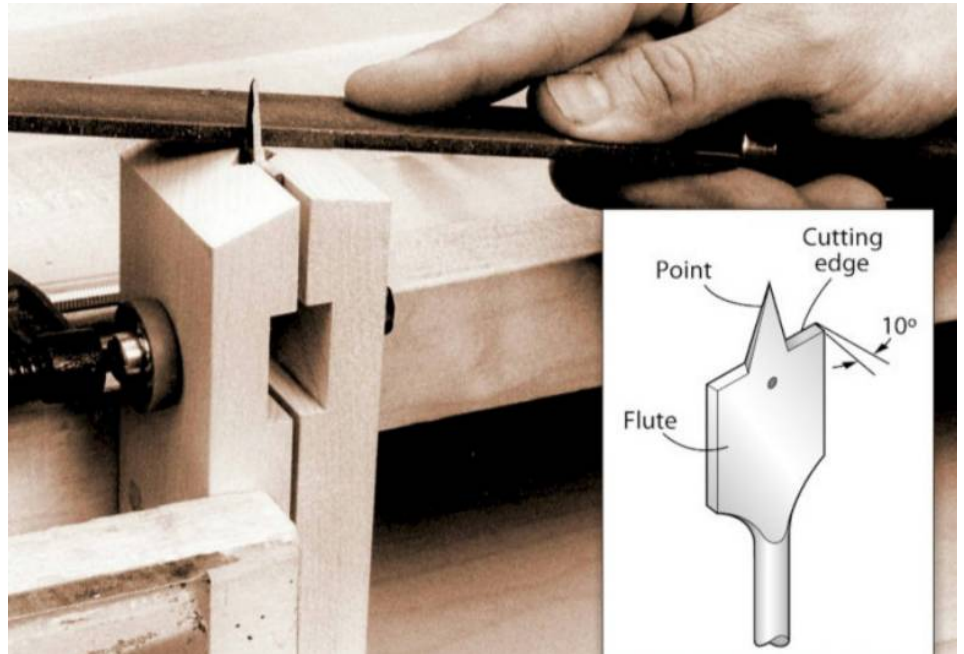
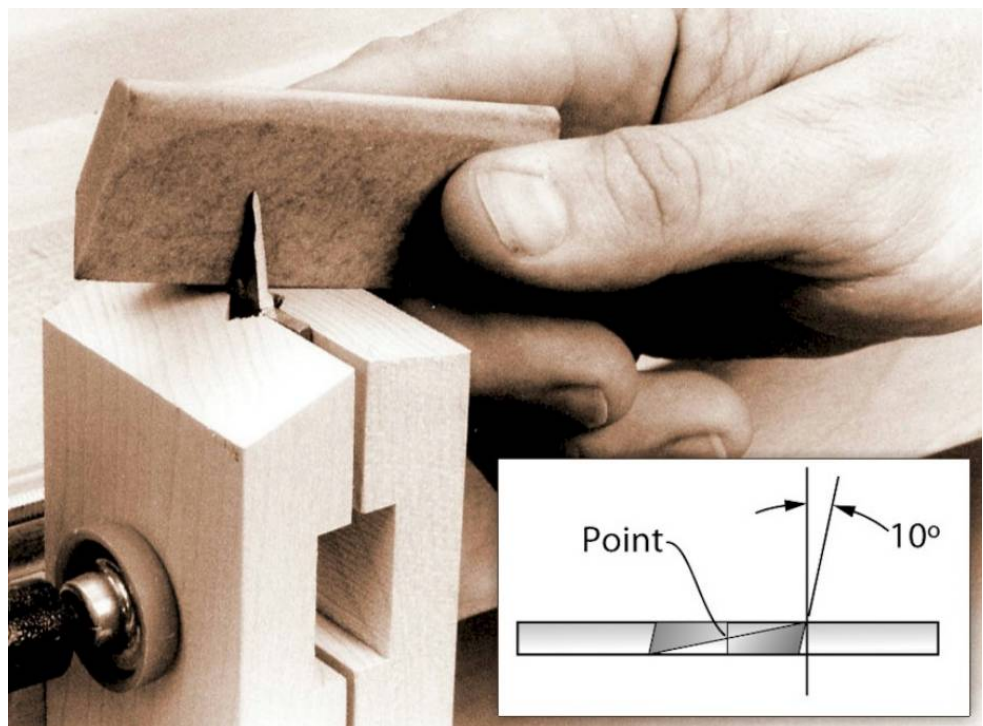


Sharpening Drill Bits

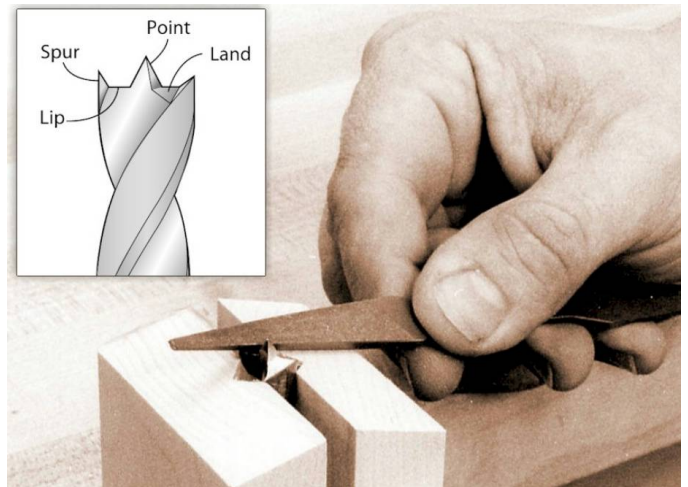
To sharpen a spade bit, first sharpen the flutes with a mill file or auger file. Hold the file at a 10 degree angle (approximately) and file the edges so the ears (outside corners) are even with each other.



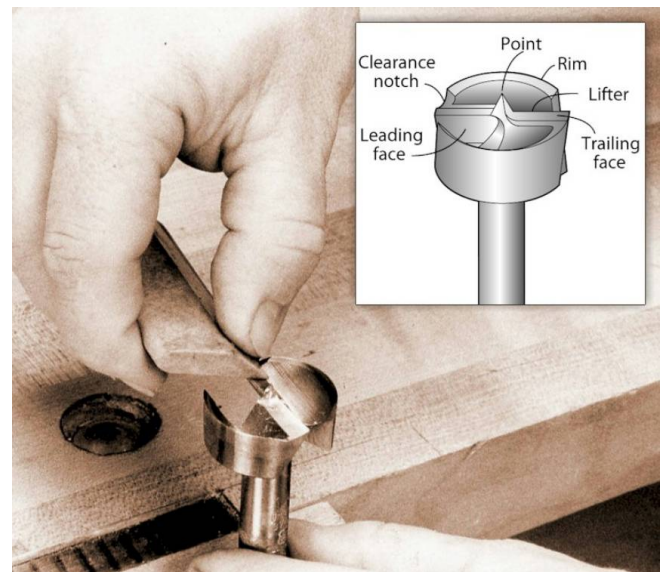
After filing the flutes, lightly hone the sides of the point with a slip stone. Hold the stone angled back about 10 degrees. Count your strokes and hone each side the same amount to keep the point centered. Don't hone too much! Unless the bit is badly worn, each side should require only 5 or 6 strokes.



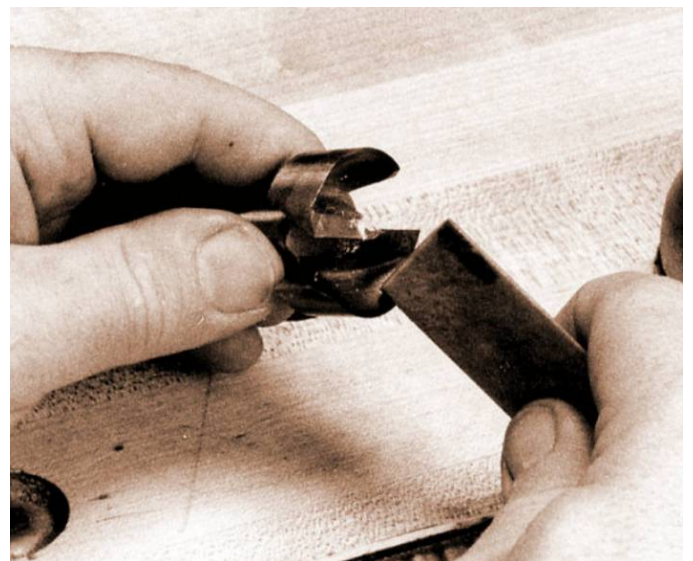
The procedure for sharpening a brad point bit is similar to sharpening an auger. Use the end of an auger file with safe faces to file the spurs and the end with safe edges to file the cutting edge. There is one important exception, however. Instead of filing the leading face or lip of each cutting edge, file the trailing face or land.



To touch up a Forstner bit, use a slip stone to hone the leading and trailing faces of each lifter. Hone the leading face first, pressing the stone flat against the surface. Then hone the trailing faces. The clearance notches on each side of the bit will let you reach them easily. Count your strokes and hone each side of the bit evenly.



Use the rounded edge of the slip stone to hone the inside edge of the rim. Roll the bit back and forth with your fingers while holding the stone against the rim.



This guide holds both spade bits and brad-point bits, helping guide the file as you sharpen. When sharpening spade bits, use the angled end of the jaw that's cut 10 degrees off square. For brad-point bits, use the jaw that's 20 degrees off square.

Place the bit between the jaws and clamp them together. Position the bit with the thumbscrew so the flutes or lands are about $\frac{1}{64}$ inch above the angled surface of the jaw. Sharpen the bit until the cutting edges are even with the jaw, holding the file or stone parallel to it.

