



CHOOSING THE RIGHT CARBIDE BIT

To see if you need a left hand cutting or right hand cutting, see which way your lathe trues toward the tabs. But remember, your bit is installed upside-down so it will be backwards to what you have to order. Remember that most of the machining world cuts with bits right side up. So if your lathe cuts from right to left like my Integy Xipp or my old Cobra, you'll need a left hand bit. The old Twister lathes cut from right to left so they'll need a right hand bit.

HAND SHARPENING YOUR CARBIDE TOOL BIT

OK, the #1 rule when hand honing with a diamond file is, NEVER, EVER FILE THE TOP OF THE CARBIDE PIECE. If you get this part even slightly rounded, it will have to be sharpened with a tool sharpener because you can never cut it back far enough by hand to make it flat again. Even if you do, it will likely be at the wrong angle. There's no need to hone this part of the bit anyway.

The bit cuts from a sharp point formed by the convergence (coming together) of three angles on the bit. A new bit comes rounded on the point. It will work this way because it uses the top sharp edge to cut with. But when this gets dull, you want to sharpen it to a point. When honing by hand, most of your work will be on the angled side (the part of the bit *not* 90 degrees from the commutator). However, you must lightly touch up the 90-degree side because of the burrs left from honing the angled side. Just a couple of strokes will do it (boy, I've heard that before, ha).

Try not to change any of the angles; file the bit with that in mind. If you have a good magnifying glass it's helpfully in inspecting the point during the sharpening process. Use the #400 grit file (available from McMaster-Carr) if you have some material to cut away and then touch it up with the #600 file. It may take a little practice to get it cutting the way you like it but just think of all the advantages you'll have over a diamond and if you screw anything up, *it's only 4 bucks!*

Happy Cutting!

BIG JIM