



Sharpening Carbide Bits for Truing Comms

DIAMOND BITS VERSES CARBIDE

FOR YOUR PIT LATHE.

Choosing A Bit

First, the benefits of carbide supercede that of a diamond. Here's why. If you've never used a diamond tool bit before, you will probably chip it before you figure out how to set it up. Then you won't know it's chipped and you'll keep trying and trying and you'll look like Big Jim and Hank by the time you stop pulling your hair out. They chip very easily. Then you're out of a bit of money and have a whole lot of frustration ahead and behind you. Diamond bits are for experienced pit lathe users or machinists. I have been cutting toy motor comms for 30 years and I use carbide bits.

Diamonds can go bad if you take too big a cut, if you hit the tabs, even if it was cutting fine when you packed it away, a diamond bit can be bad the next time you take it out. Don't ask me why. I have even chipped a diamond just by using the wrong kind of brush to clear the chips away. I figured out later that the steel band around the small paint brush I was using must have hit the tip.

And no two diamond bits are the same as far as setup goes. Some bits need no shims. Others of the same brand and type will require 2 shims. Don't ask me why on that either. Carbide bits of the same brand always seem to setup the same. Another reason to use carbide is when it's dull, the finish looks like crap. A diamond will just start cutting out-of-round and you won't know it until your start putting your motors together because the finish looks fine.

Unless you are extremely experienced, stay away from diamond bits. Use carbide until you gain that experience. Then you can either buy a tool sharpener like I did to do the job right, keep honing the tip with a diamond file until it is so distorted it (you unintentionally change the angles a little each time if you won't work anymore then sharpen by hand), throw it away and start with a new bit or use a diamond. Here's the tool sharpener I use. I've had it since 1980 and it still works fine. www.glendo.com.