

# New Life for my Beloved Drill Doctor, version 1.0

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I have owned this Drill Doctor for 16 years and am very happy with it. About 5 years ago I replaced the diamond grinding wheel. Now the collet has become hard to turn. Before I buy a new collet for \$35, is there a way to fix what I have? Nothing to lose.

I found that with no drill in the collet, it turned fairly well in the body. But when I installed a 1/2"

drill and tightened down, I could not fully install the collet. Upon closer inspection I found that the force of the collet fingers over the years had slightly expanded the outside diameter at the jaw end. Steel collet fingers and plastic or hard rubber collet. Hmm.



I installed a short length of 1/2" drill rod in the collet, locked it down tight, and used the rod to mount the assembly on my lathe.

Then, using a very sharp cutter and high RPM, I took a light cut over just

the jaw part of the collet. After each pass I test fit it to the Drill Doctor. When I achieved a sliding fit similar to when it was new, I stopped.

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I probably reduced the outside diameter by 0.005" and this has weakened the collet a little. My guess is that the jaw end will expand over time and I won't be able to use this trick again.

At that time I will likely pay the money for a new collet. Yes, this antique Drill Doctor is *that* good.

I welcome your comments and questions.

If you wish to be contacted each time I publish an article, email me with just "Article Alias" in the subject line.

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