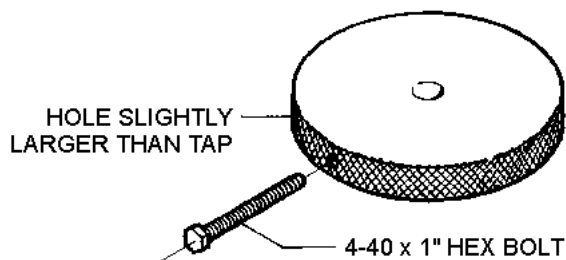


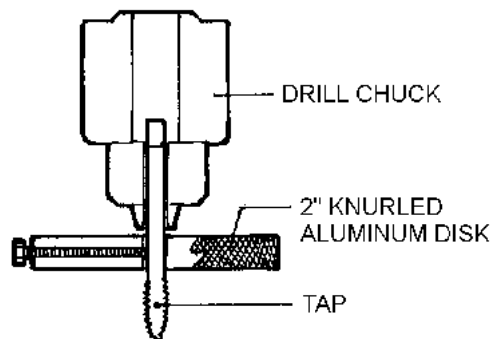
TIP 7 — A fixture for using small taps without breaking them/Bob Shores

“I have read many tips on tapping holes—some good, some not. Five years ago I dreamed up a tapping method for small holes. I tap a lot of holes with 0-80 and 2-56 threads, and since I have been using this method, I have not broken a tap in five years.



Bob Shores' tapping aid is easy to make.

After drilling the hole in your part to the proper size for tapping, the drill bit is removed from the chuck without disturbing the work. A 2" aluminum disk, knurled on the outside and drilled and tapped for a 4-40 hex bolt grips the tap just above the flutes. The end of the tap is gripped in the drill chuck and lowered until it just touches the work. The chuck is then loosened to allow the tap to turn freely. The disk holding the tap is turned with your thumb and forefinger. The drill chuck acts as a guide to keep the tap running true, and your fingers are very sensitive to the amount of torque being applied. To break a tap you would have to apply a lot of force.” —Bob Shores, Ruskin, FL



The tap is held in perfect alignment by the chuck. When the chuck is loosened slightly, the tap can be rotated using the disk and your fingers which provides an excellent "feel" for the process. The tap goes in straight and is unlikely to break.

NOTE: Bob's tip has been reprinted from Joe Martin's book, [Tabletop Machining](#).