

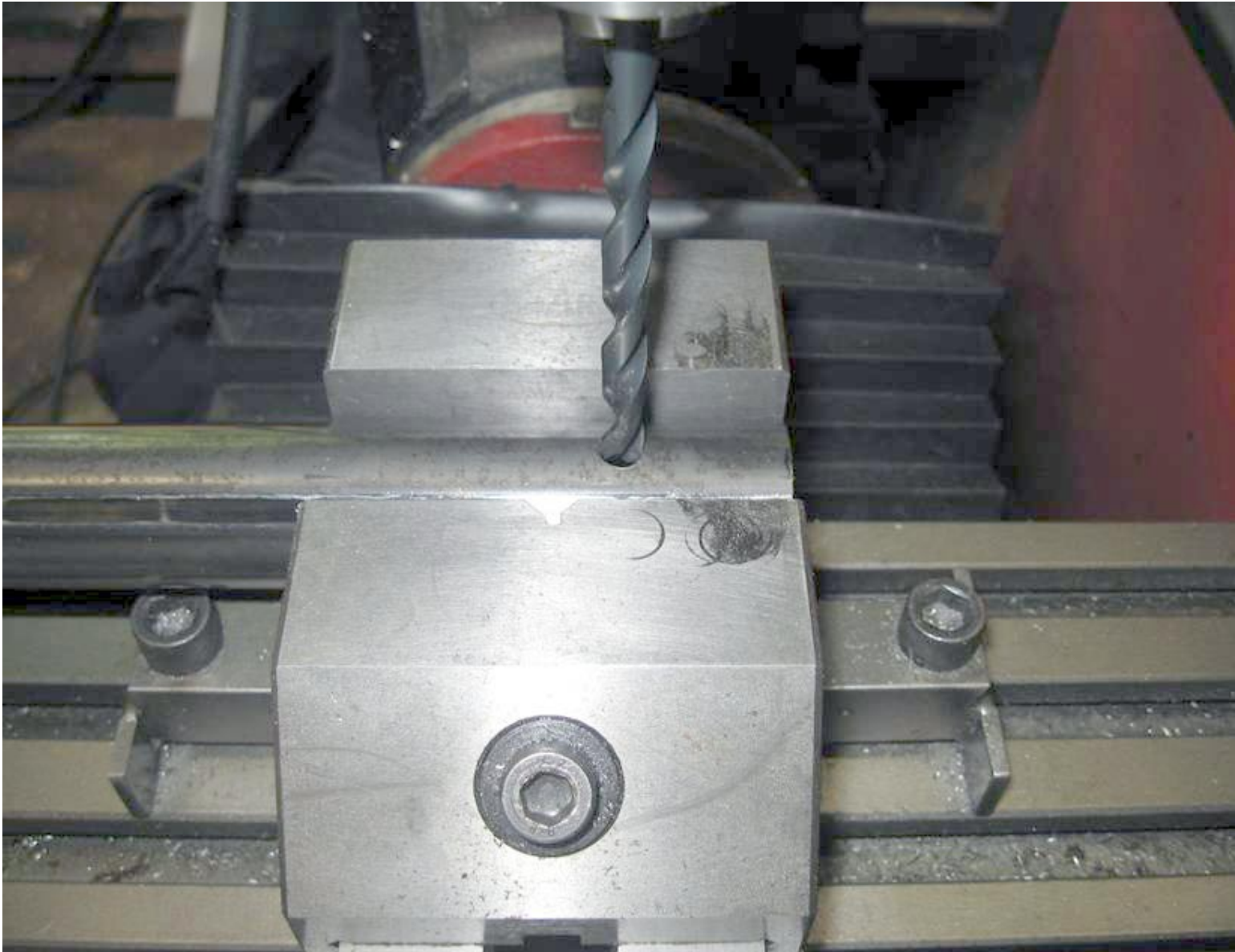
No-Mar tip conversion/replacement procedure

This procedure can be used for customers who want to convert their legacy Delrin demount tips to the new No-Mar tips, or for customers that just need to replace their No-mar demount tip if for some reason they have broken or bent it. For you existing No-Mar tip owners just remove the set screw completely, pull the damaged tip out, tap the new tip in, screw the set screw back in and your done.

Items needed: One drill bit size F
One 1/8" drill bit
One metal punch or metal scribe
One hammer
One 5/16" x 18 tap and a tap holder. (18 is the thread pitch of the tap)
Drill or Drill press (A drill press is really better to keep the hole square)
Bench vise or portable vise for a drill press/drill mill like pictured below.

Note: If you have a tire tool with the Delrin tip installed DON'T use either of the two existing 1/8" holes. Both of the existing holes are offset in the bar by 3/32" so they are not centered.

The first thing you want to do is securely clamp the demount end of your tire tool in your vise as flat and square as possible. You want the hole to be as straight as possible when you drill through only half of the bar. Drilling half way through means you ONLY drill through one side of the bar NOT both sides. Now you need to mark the bar where you want to drill your hole. Measure exactly 1" from the end of the bar and mark it as close as possible in the center of the bar with the punch or a metal scribe. Next you want to find the center of the bar so measure 1/2" in from one of the sides of the bench vise. This is another reason why you clamped the bar in the vise since it makes it easy to find the center of the 1" round bar. Now mark this spot where the lines cross with the metal punch or scribe and use the metal punch and a hammer to tap a starter hole for your 1/8" drill bit. If you are using a hand drill in a bench vise then do the best you can to make sure the drill is square with the tire tool in both directions. Once the 1/8" pilot hole is drilled now chuck the size F drill bit and finish drilling the hole to the proper size. Take your time and you won't make any mistakes. Measure twice and drill once!



Now it's time to take your 5/16" x 18 tap and tap your hole. Use some tapping fluid or oil to lubricate the tap which makes it a LOT easier and will help prevent you from breaking the tap in the hole which is something you don't want to do. Try and keep the tap as level as possible when turning it because it will ensure the set screw you install later will go through both holes of the UHMW demount tip. Making sure your hole was drilled square in the first step will ensure your hole gets tapped square. If you have never tapped before then here is a pointer. Turn the tap about 1 full turn clockwise and then back the tap out counter clockwise about half a turn. Doing this helps keep the threads on the tap clean which will in turn keep you from breaking the tap in the hole. This is a pretty large tap, so you really have to try hard to break it. Keep repeating the full turn clockwise and half turn counter clockwise process until the hole is completely tapped. You can tell when it's finished because the tap gets REALLY easy to turn clockwise and will spin in the hole freely.



After removing the tap take your shiny new demount tip and insert it in the end of the bar, being careful to line up one of the holes on the tip with the hole in the tire tool. You know the hole you just drilled and tapped. Next tap your tip down into the bar until the shoulder of the demount tip is flush with the end of the tire tool. Note: to make tapping the demount tip into the end of the bar easier you can spray the demount tip with a shot of silicon or WD40. Just a little will do!



It should look like the picture below and if it doesn't it needs to or you won't be able to screw in the 5/16" x 7/8" set screw provided with the new tip.



Now take the 5/16" set screw and screw it in with the proper size allen wrench until the set screw bottoms out on the other side of the bar. The set screw will be snug the whole time you are screwing it in with the allen wrench. That's because the set screw is cutting threads in the UHMW. This is a good thing since its purpose is to hold the UHMW demount tip securely in place. You are now finished with the conversion and can pat your self on the back or where ever you pat your self when you do something right.

