

Hidden Clip Using a Dremel Tool

By
Martin Osborn

A.K.A “**MartinPens**”

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Hidden Clip - using a Dremel

March, 2011 By Martin Osborn (MartinPens)

I am so thankful for the IAP Library and the articles which got me started in trying hidden clips. By looking in the Library Index I found a few articles about hidden clips done different ways. I sure wish I had a laser set-up to get a perfect cut as shown in the article "Invisible Clip for the Jr. Emperor" by WoodenInk. And of course there are the articles linked in the tutorial by VICK that reference Russ Fairfield's techniques in the Guild back in 2004.

My technique is not new in any way, really. But I do use a Dremel and I have tried to take good photos.

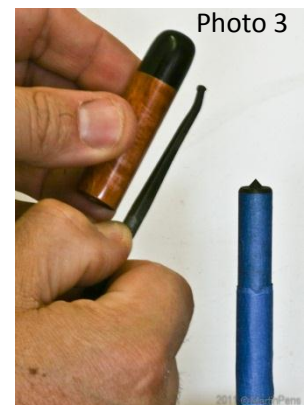


1. I use a punch that easily fits inside the cap. I wrap just enough blue tape around it to create a snug fit. A thicker layer of tape below that keeps the cap from sitting all the way down onto the punch. I want some space inside the cap above the punch.

Secure the punch very securely in the vise. To have it slip while using the Dremel on the cap is VERY frustrating. I actually put the punch further into the vise so that the vise gripped the tape.



2. The next step can be done several ways. The goal is to measure where the tube ends inside the cap. I'm not worried about being too accurate here as the Dremel tool will handle any wood and/or brass it comes in contact with. Visualize where the cap "wants" to go and shoot for that location. I insert the end of a round file into the cap (Photo 1) until I can feel the lip of the tube inside and simply mark the spot on the file with my thumb. (Photo 2) Holding my thumb on the spot marked, I take the file out and transfer a small mark onto the wood of the pen cap. (Photo 3)



Next, I cut and prepare the clip. I will need a prepared clip to help me determine the size of the cut in the steps that come later on.



I know it looks horrible, but it will be inside the cap. Work carefully so as not to scratch any part that will be showing.

The red circled area is problematic and will be dealt with in the next steps.



I use the metal cutting tool on the Dremel to take off this corner.

**** Warning ****

Always wear safety goggles when using a Dremel. Sparks and brass flakes do not go well with eyes. The brass flakes shooting off of this tool will also damage glasses, so if necessary wear a face shield.



It is important to just take off the corner and not get carried away.

Visualize the part that will be on the outside and don't come anywhere near it.



Secure the cap firmly on the punch



I use the smallest Dremel tool.



DREMEL Straight
0,8mm x 2,4mm
Model no.111

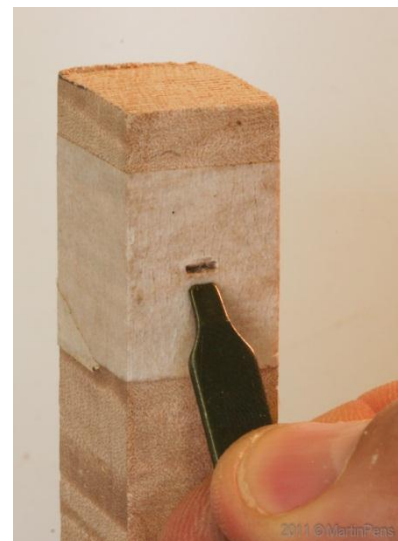
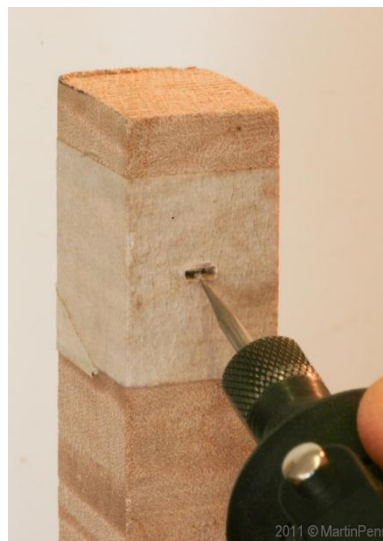


O.K. now is where a steady hand really comes in handy. On high speed, plunge the tip straight in on the mark. The goal is an opening just wide enough for the clip. In this case that means 1/8 of an inch wide.

*It is very important that the top of the cut is straight because this will be seen above the clip once it is assembled. If the cut needs to be opened, open it on the bottom side of the cut.

Using a lighter colored sample wood, the cut is much easier to see.

Make your initial cut straight and small. You can always add to it. This cut is approximately 1/8 of an inch wide which just happens to be the same as the little tool that comes with the Dremel. Handy!



Say goodbye to
the ugly bent
up part! :)



Carefully insert the clip into the cap slot.
Being careless here results in scratches on
the outside of the cap.

After doing many of these I still have to
make minor adjustments either to the
width of the cut or the shape of the bent
curve of the clip.

If prior drilling depth of the cap and
location of the cut in the cap come out just
right, the bent part of the clip will rest on
the top of the inside of the cap.

*Flip the cap/clip over and use medium to
thick CA or an epoxy to secure. Keep the
cap tipped at a slight angle so glue does
not run out of the cut!*

I don't go into detail about securing the clip
on the inside of the cap because I haven't
found a technique that I truly like yet.

A wood or metal spacer pressed inside of
the cap has never worked for me. It always
interferes with the nib when assembled.

The best outcome I've had is a round thin
slice of sponge that is pressed up inside the
tube, trapping the clip to the inside top of
the cap. I then apply a few drops of thin CA
inside an angled cap (so that it does not
run out of the cut) or even medium CA.

Good luck and I hope you share what new
techniques you learn as you experiment.

