

## Release a Frozen Sawnut

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By

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ver try to remove the handle on a vintage saw and there's that one brass nut/bolt set that's locked up, and your screwdriver just spins and spins with no result? Well here's how you get your frozen sawnut off.

Now don't laugh, particularly if you're from Canada. This chapter really is about how to get your frozen sawnut off. We're talking saws, here. Okay? You're even going to learn how to secure your saw in an easy-to-make clamp jig in the process, that can also be used to discuss truing up a sawback in Chapter

Here's the concept in a nutshell: you'll buy an inexpensive wooden clamp available at any home



store, bore a 7/8" diameter hole, line inside of the jaws with cork rubber you can purchase from <a href="McMaster-Carr">McMaster-Carr</a>, clamp your saw handle inside the jaws, then unscrew the frozen nut through the access hole you've bored. You see—the hole allows you access to the slotted head of the nut (or bolt,

depending on manufacturer), and the nut/bolt on the other side of the handle is securely held fast through the tight, clamping friction the corkrubber-lined opposing jaw of the clamp exerts. Easy-peasy.

What follows now is the step-by-step procedure that illustrates how to make your jig with recommended tools & supplies you likely already have in your shop, along with pics for illustration.



**Step 1:** Purchase an inexpensive wooden clamp from your local home store, and secure the following tools/supplies:

- 3M adhesive spray
- 2"-wide corkrubber. You'll use about 8" overall, but will likely need to purchase a roll of the stuff. Don't worry—this stuff is handy to have in your workshop for other requirements.
- Exacto knife, or some sort of razor tool.
- Screwdriver. I like <u>Lie-Nielsen's tenon nut screwdriver</u>, and I always have two in the shop: one for newer fasteners which have

wider slots, and another I'll take to a grinder to thin out the blade so you can access vintage sawnuts which usually have narrower slots.

- Masking tape.
- 7/8" spade bit
- 7/8" router bit
- Drill of your choice to accommodate above bits.
- Face vise on your bench, which you likely already have.

**Step 2:** mark a point center-of-mass about 1.25" down from the top of the jaws; doesn't matter which side. Chuck your 7/8" spade bit in your drill and drill through the jaw perpendicular to the vertical axis of the jaw. Take care not to drill into the opposing jaw. Widen the jaws to prevent this from happening. Resp the outer perimeter of the hole on the outside of the job to prevent splintering (optional).





**Step 3:** Now you're going to line the inside jaws of the clamp with cork rubber. Even though adhesive cork rubber is available, the adhesive will wear out and the cork rubber will begin peeling off. To prevent this, I like spray 3M adhesive spray onto the area inside the jaws where the cork rubber strips will do. Mask off the exterior part of the clamp with painters or masking tape to avoid spraying where you don't want the adhesive—it can get messy! Mask off other areas on

your bench you don't want to hit as well. When ready, spray the area to be lined with cork rubber.

Let the spray percolate for about 90 seconds—you'll get better bond that way. Then apply two, 4.25" strips of cork rubber to the inside jaws. It's okay and even desirable for the strips to be oversized; you'll



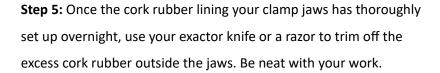
trim them down to 4" and cut off the outside excess in the next step.



**Step 4:** Close the jaws of your clamp with plastic tape or a plastic bag in between to prevent the strips from gluing onto one another—the cork rubber is a bit porous and you don't want the spray adhesive to

leach through and bond the jaws together. Once your clamp is closed tight, take a break for the

night and let your cork rubber glue-up set overnight.





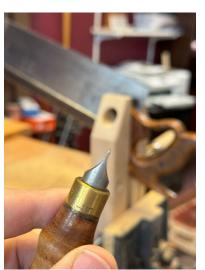


**Step 6:** Now remove the cork rubber covering the bore hole without damaging the cork rubber on the opposing jaw. This is where your 7/8" router bit comes into play. Widen the jaws enough to clamp onto your bench over a sacrificial piece of wood. Chuck your router bit into a drill and drill through the hole you bored earlier with the spade bit

and let the router bit eat into the sacrificial wood. Release the assembly and now you have a very neat patch of cork removed from the bore hole inside the

jaw. Mount your clamp into the face vise of your work bench.





**Step 7:** We're turning our attention at this point to the tenon nut screwdriver you

sourced from Lie-Nielsen (or some other screwdriver with a wide blade. Make sure your screwdriver blade actually fits inside the slotted nut/bolt of your vintage saw. This is important. If your screwdriver blade is too thick, you'll mark the brass slotted nut/bolt. If necessary, take your screwdriver to a grinder to thin out the tip just enough so it

will fit. This why I like having two tenon nut screwdrivers; one for

old vintage saws which generally have thin slots, and one for newer saws with wider slots.



**Step 8:** Mount your saw into the clamp, such that the frozen slotted nut/bolt is exposed in the hole you'll access with your screwdriver. Ensure the jaws remain parallel to one another as you tighten the clamp; this will maximize clamping pressure right where you want

it—on the rounded head of the fastener piece opposite the slotted nut/bolt you'll engage with your screwdriver.

**Step 9:** Carefully insert the screwdriver into the slotted nut/bolt and steadily unscrew the locked fastener set. And that does it! You've unlocked the frozen nut/bolt assembly. That said, if your fasteners are flush to the handle, you'll need to clip off a small square of cork rubber and adhere it to the fastener piece you want to hold fast, and that will do the trick.



So there it is. Armed with a slightly modified wooden clamp, a screwdriver and tools & supplies that likely already exist in your shop will enable you to release a frozen nut on your vintage saw.

