

CASEY  
CREAMER

SAW  
DOCTOR

## When you are fixing a saw with a stretcher roll, how do you know how hard to push on the lever?

In the tradition of the old secret sect of saw doctors, the answer would be “you just know.” My faithful readers all know that I don’t subscribe to the old order of secrecy any more than I subscribe to the theory that saws are supposed to be dished so that they can stand up straight.

The real answer is the same answer to the question of how hard to swing the hammer. It’s all about cause and effect. The harder you swing the hammer or the harder you push the lever on the stretcher roll, the more effect you’ll see on the saw. But you only want a limited amount to happen at any given time during the process of fixing a saw. If you don’t get enough change, you can always do whatever you did, again. If too much happens, that means that your action went too far and you have to bring the

saw back. That is simply extra work that lazy people like me would rather avoid if possible. But the fact is that it is just not always possible. Sometimes you just push the stretcher roll lever too far or swing the hammer harder than necessary.

I use a hammer and a stretcher roll, and I use both for leveling or tensioning. When you level with a hammer, it will alter the tension in the process. When you tension with a stretcher roll, it may change the levelness of the saw during the process.

If the saw has a bend in an area that also needs some tension added, I will most likely level it with a hammer. If the tension is where I want it, but the saw needs to be straightened, I will do that leveling with the stretcher roll because it won’t affect the tension. If a fairly level saw needs tensioning, I will do it with the stretcher roll, and if that bends the saw a bit in the process, I can easily finish up the job by straightening it with the stretcher roll. Again, my lazy man’s goal is to do as little as possible to get the job done right.

One of the keys to fixing saws is to have all of the proper tools and techniques to be able to accurately check the saw before, during and after the work is done. That means having the proper lighting, a good set of precision, saw makers straight edges in various sizes, and a very accurate test arbor that is level to a machinist’s level.

Many very successful saw doctors did very well without the luxury of some of those tools, but I guess I am just not as smart as they were. I am not kidding here. Some of those folks could



Determining the proper amount of force applied with the stretcher roll is not much different than making the same determination with a hammer.

do really amazing work with somewhat primitive tools, and I give them a lot of credit for that. On the other hand, thanks to all of the secret-keeping, some did very primitive work regardless of their tools, but they still had a faithful following from sawmillers who may have never known better.

That said, I have the proper tools and I happen to believe that the more time and energy I invest in checking the saw during the process, the less time and energy I will have to expend by over-fixing the saw and having to bring it back. Over-fixing doesn't mean going farther to make it better. It means hitting it too hard so that it goes past where it needs to be, meaning that you have to bring it back. That is wasted motion as far as I'm concerned.

Every time you hit a saw with a hammer, or roll it, you must be aware what it looked like before you hit it, as well as what it looks like after you hit it. Now you decide whether you hit it too hard, not hard enough, or just right. I suppose you could call it the Goldilocks method. Whatever the result, you will then file that away in your mental database and the next time you see a similar situation, you should know how hard to hit it based on past results. Of course, it gets a little more complicated than that because there are a bunch of other variables that you also have to factor in when you are deciding how hard you want to hit it.

How thick is the saw? 7X8, 6X8, 6X7, or a way-too-heavy slasher saw? A saw that is low on tension will require a harder hit to level it than a saw that has the right amount of tension. And a saw that has too much tension will seemingly go through to the other side if the hammer gets anywhere near it. Different plates hammer easier than others. Sometimes that is a difference between manufacturers. Other times it depends on less obvious factors such as when the saw was made, or which plant the company manufactured it in.

Yes, when you rely on cause and effect as much as I have to, over the years you learn ways to save a lazy person like me a lot of work. But remember that to benefit from your experience, you first have to put in a lot of extra work studying all of the variables involved, so that you can accurately predict the cause and affect you'll see. That said, no matter how good you are, there are times when the saw won't react exactly like you intended. Then you can chalk that up to experience, as well.

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**Questions about sawmills and their operation should be sent to Forum, The Northern Logger, P.O. Box 69, Old Forge, NY 13420, FAX #315-369-3736.**

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