



## How long does it usually take you to hammer a saw?

Most Northern Logger readers are probably expecting me to come back with one of my typical attitude-laden comments that might go something like, "that depends on how bad the saw is or what condition the saw is in."

As much as I hate to depart from my standard saw doctor approach, I have to admit that in most cases it is not the saw's condition that determines how long it will take to hammer it properly. In fact I have seen many cases when a saw that is in such bad shape it barely fits into the crate properly, takes less than an hour to fix while a saw that just needs a touch up takes me half a day to get it where I want it. This disparity demonstrates that there are a number of variables involved in the hammering process beyond the saw's appearance, and any one of them can determine how long it takes to get to the finish line.

Of course, what you have for tools and how your shop is set up is an important part in running an efficient operation. For example, a stretcher roll can not only save a lot of time and effort during the tensioning part of the process, but having a stretcher roll equipped with a leveling roll or leveling attachment can save a tremendous amount of time in certain situations.

When you tension with a hammer or a roll, chances are that it will change the levelness of the saw as a collateral result. And when you level with a hammer, it will definitely change the tension because when you hammer down a high spot, the saw will stretch in that area. That means that you have changed the tension in that area and as a result you have changed how much tension the saw has. If you had to do some leveling on the rim, you would have also drawn out some of the tension, while leveling with a hammer in the body of the saw will also add tension in that area. Now, if you started with a saw that had a bend in the body and was also lacking in tension, then leveling the saw in that area with a hammer would have accomplished two needed tasks at the same time. That's efficiency.

If the saw had too much tension and a bend in the body to start with, on the other hand, then hammering in that area may make the saw straighter, but it will also make the tension problem worse. In this example, it would have saved a huge amount of time to fix the tension problem with the stretcher roll and then put the leveling roll on and straighten the saw using it. You see, leveling

with a hammer straightens by stretching, while leveling with a leveling roll straightens by bending, which means that you can level all day long without changing the tension.

In that case where the saw has too much tension and a bend in the body, if you didn't have a stretcher roll and all you had to work with was a hammer and anvil, here is how the process might go:

First you would go out to the rim of the saw and hammer some tension blows all the way around, being careful to miss the guideline so as not to leave any hammer marks that would cause the saw to rattle between the guides. You would do this as many times as necessary to get the tension to where you want it.

Next you would use leveling blows directly on the bend to straighten the saw. You do that as many times as needed to get it straight. When the saw is straight enough, you will discover that it also has too much tension in the body again, because when you straightened it with a hammer, you stretched the area you were straightening.

Hopefully the tension isn't as far off as it was when you started. So now you go back and take a little tension out and then when you check for straightness, you find that during the tensioning process, you managed to get the saw a little out of level. If things are going your way, the saw is less bent than when you first started. But it still does need to be straightened. Without the luxury of a stretcher roll and a leveling roll, you will find yourself going back and forth between tensioning and leveling until you manage to funnel it all down to being flat on the log side, with an acceptable amount of wobble, and the right amount of tension in the right location.

So you can easily see where having the right tools is the first variable that affects how long it takes to properly hammer a saw. But even having the best tools and an efficient shop layout doesn't guarantee that things will go quickly, or even smoothly for that matter.

The first thing you do after cleaning the saw is to assess its specific condition. Then you have to develop a strategy for what to do to and in what order. Sometimes that strategy works great and no matter how bad the saw was, it is finished in no time. But there are also many times when you don't choose the best strategy. There are many ways to skin a saw, and as long as the saw ends up in the right configuration, it is not so important which route

you took to get there, as long as you don't charge by the hour.

An example of employing the right strategy is, let's say the saw has a bend in the body and is also lacking tension in that area. You could go ahead and tension the saw with your stretcher roll until you have the tension where you want it. Then you straighten it with the leveling roll until the saw is straight.

This method will work, but I don't think it is the most efficient approach in this case. Instead I would just level that bend with a hammer, knowing that if I do it right, it will gain the amount of tension that it needed at the same time. Now it's done and I can go on and solve some other saw's problems.

Even when you choose the best strategy, there are times when it just doesn't go smoothly.

Whether you use a stretcher roll or a hammer, each time you use it, one of three things will happen. In the case of leveling with a hammer, either you hit it too hard and the bend goes through to the other side, or you don't hit it hard enough and essentially the saw laughs at you. The best outcome is when you hit it exactly right and the bend goes all the way down without going through to the other side. Knowing how hard to hit it or how hard to push the lever on the stretcher roll is mostly skill that comes from trial and error.

But even knowing how hard to hit it is also based on analyzing a series of variables. Some brands of saw seem just a little softer than others, and as a result you have to hit them a little lighter than others to get the same result. I am even aware of one brand that doesn't have that problem unless you run into one of the company's saws that happened to be manufactured at a plant shut down long ago, and for good reason. But I still run into saws that I know came from that plant based on their serial numbers.

Of course you generally have to hit a 6 X 7 gauge saw a little harder than a 7 X 8 gauge saw, but a saw that has too much tension should be hit a lot more lightly than a saw that has too little tension. And if you are leveling with a hammer, then the tension is constantly changing, so you have to constantly change how hard you hit the saw to address any bend of a given size.

Since I don't charge by the hour, I have the luxury of being able to take whatever amount of time it takes to hammer the saw properly without having to worry about how long it takes since it doesn't affect the size of the bill. My philosophy is that every task has a basic value regardless of how long it takes you to complete the task. If a saw arrives in horrendous condition, I charge extra to hammer that saw regardless of how much or little time it takes me to properly fix it. And by the same token if a saw shows up in normal condition, I will just charge the regular price even if for some reason it happens to take me all day.

**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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