I have been hammering saws for a number of years now, but every time I do a 60” saw, I seem to have trouble with it and much less confidence in the results than with smaller saws. What am I doing wrong? Are 60” saws that much harder to hammer?

There are a number of things at play here. First, because of their size, 60” saws are certainly more saw to deal with in two different ways. All saws require a lot of handling. We have to take the saw out of the crate and then roll it over to the cleaning room and lift it onto a bench so that we can clean the first side. Then we put it back on the ground and turn it around and lift it onto the cleaning bench again and then clean the second side. For this reason alone, it’s a good thing that there are only two sides to a saw. We would be cleaning all day if we also had to clean all of the “sides” that some sawyers refer to, such as the “inside,” “outside,” “near side,” “far side,” “cab side,” etc. Some of you know that I insist on proper terminology to facilitate easy communications for the troubleshooting process. When we narrow it down to board side and log side, nobody gets lost or confused. But I digress.

Let’s begin by understanding that if you leveled a 30” saw so that the rim would indicate at +/- .015” the exact amount of levelness on a 60” saw would come out as +/- .030” which would be unacceptable and not within a proper running tolerance.

That is one part of the problem. The other part is that most of us don’t have to hammer that many 60” saws compared to other sizes. I would say that I see 54” and 56” the most these days, with 52” coming next. I rarely see 50” or 60” (thankfully) and I occasionally see 48” saws, especially on scragg mills. The only reason we see so many 56” and 54” saws is because the collars have gotten bigger on most of the mills. In the early ‘80s there were still a lot of 4” and 5” collars. Now the bulk of the mills are using 8” collars, although there are still a few that use 6” collars. When the collar gets bigger, the saw size has to increase to be able to maintain the same depth of cut, or to be able to reach through the same size logs as before.

Because most of us don’t see very many 60” saws, we tend to be ill-equipped to work on them properly. The most important part is that we all use what we call a long straight edge to check for dish and also during a part of the tension checking process. A “long” straight edge should cover just a little bit less than the diameter of the saw you are working on. I have a 24” straight edge that I use as a “long” straight edge for 24” to 30” saws, and I have a 36” straight edge that I use as a “long” straight edge for 34” to 44” saws. The “long” straight edge that I use the most happens to be 48.”

Theoretically that is just about two inches too long to use on a 48” saw, but I am able to manage that size just fine. The 48” straight edge is just right as a “long” straight edge for saws that are 50” to 56,” but that’s about it. It is really a bit too short to be used properly on a 60” saw. The sad fact is that most saw doctors—including myself—don’t even own a “long” straight edge that is any longer than 48.” And that is only because we do so few 60” saws.

Why don’t I have one for the few 60” saws that I do? Simple. A proper straight edge is quite expensive and not even all that easy to come by in the 56” length. On top of that, a 56” straight edge is really more steel than I care to gently handle with one hand while marking the saw with the other hand. Of course I would have one and use it if I had more 60” saws to work on, but I don’t, and that suits me just fine. Does that mean that I am not able to work on 60” saws? Of course not. It just means that I have to fake it a little when using my long straight edge.

I still do most of my leveling with a 12” straight edge, so there is no problem there. The issue arises when I have to check the saw for dish. In that case I have to slide the 48” straight edge up and down the saw to be able to try to see all of it. It works, but it really isn’t quite the same as having the correct size straight edge would be. Fortunately I also have a laser light in my shop that points at my test arbor to show exactly where any size saw should stand when it is flat on the log side.

The only other issue would be when I am checking tension.
Fortunately the “long” straight edge part of the tension checking process isn’t really all that important because it is just a very small part of that entire process. But I can tell you that the sweet spot for the tension is in a much different position on a 60” saw than it is on a 48” or a 54” saw.

I generally define the area of the saw where you want to see the most drop to a 12” straight edge when in the tension checking position as follows: If you take a spot about halfway between the guideline and the collar line of the saw, and then move out towards the rim about two inches, you will have it. That is a good generalization but you do actually have to fine tune that a little for different size saws. For example, on a 48” saw, that spot would move to halfway between the guide line and the collar line without having to move out two inches. On the other end of the spectrum, I would say that on a 60” saw, you would start by going halfway between the collar line and the guide line and then move out more like about 4” or 5” towards the rim to be at the sweet spot for the tension.

So you see that basically all saws are hammered the same except there are some ways that you have to change things a little to be able to do 60” saws. And it is those differences coupled with the lack of practice that would naturally make you feel a little less confident in your ability to properly hammer any 60” saw. As we all know, the more you practice at anything, the better you get. As long as you are making the proper adjustments to your technique for the 60” saws, you should have no problems with them.

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.

The author is a saw doctor and president of Seneca Saw Works, Inc., P.O. Box 681, Burdett, NY 14818, tel. (607) 546-5887, email casey@senecasaw.com.