

# SAWMILL FORUM

CASEY  
CREAMER

SAW  
DOCTOR



## Frequently asked questions:

Although there are many things that can be wrong with a saw or a sawmill, there are generally only a few symptoms that wind up being reported. I get troubleshooting calls from all over the country and usually they start out something like, “my saw won’t stand up” or “it is running out of the log.” There are many variations on this theme, but suffice it to say that they are calling because their saw isn’t performing properly. Most of the time not performing properly means it runs in or out of the log, thus causing miscut lumber and a saw that heats and wobbles. Often their first clue that the saw isn’t running properly is either the obvious unwanted wobble in the saw, or the lumber grader informing them that the lumber is miscut. Hopefully they don’t have to wait for a rejected load of lumber to be aware that they have a problem.

So, the caller says the saw is running out and the first thing I ask is what the teeth look like. Are they sharpened accurately? Of course, most sawyers will try to figure out the problem for themselves before making the call to me. I suppose it is sort of like asking for directions when you are driving and are lost. You only stop to ask directions because your wife forced you into it. In a sawmill, it is common for the sawyer to make a call to me after the mill manager forced the issue.

Since the sawyer already tried to solve the problem on his own, the answer to my sharpening question is quite often that they eliminated the sharpening question by putting in a new set of bits. In fact it’s quite common for many sawmillers to put in a new set of bits at the first sign of trouble just to be able to cross one possibility off the list.

On the surface that may sound like a good idea, except that it’s not. I have no problem with you trying to find a cause and solution on your own. That part is okay. The problem is that by replacing the teeth with teeth that may or may not be good ones, you don’t know any more than you knew before you replaced the teeth.

First, whenever you put in a new set of bits, you should sharpen them. If you didn’t sharpen the new ones you have just given

the saw one more reason to not perform properly. And if you did sharpen them (I know you didn’t) then whatever sharpening problems you might have had with the other bits, would most likely happen to the new bits too.

New bits may be slightly chipped from shipping or could even get damaged when you put them in the saw. And of course, just as you are capable of miscutting lumber, any saw tooth manufacturer is capable of misgrinding the bits during the manufacturing process. Most new bits are well within running tolerance, but that doesn’t mean they can’t make a few bad ones every now and then. Even properly manufactured teeth that have not been damaged during shipping or installation, will not be quite as sharp as a freshly sharpened bit if it was done correctly.

So when you tried to eliminate one possibility by replacing the bits, all you did was add one more possible cause that wasn’t even there when you first started having trouble.

In the old days, if your car didn’t start, the mechanic (they are called “technicians” nowadays) would simply replace the spark plugs. If the car started, then the problem was the plugs, and if the car still refused to start he would replace the plug wires, or points and condenser. Essentially, once the mechanic decided the problem was in the ignition system he would just start replacing components in that system until by the process of elimination the problem went away.

Part of what made that work was the extremely low probability that there would be any problem with a new set of plugs, wires, points, etc. Sawmills don’t have that luxury.

Additionally, the auto mechanic didn’t have to worry that someone might have misadjusted the carburetor mixture to compensate for a weak spark. If you had a weak spark, they would attack that problem directly by replacing ignition components one by one until the car ran properly.

Sawmills are different in that respect. If the teeth are sharpened a little out of square, instead of finding that problem and correcting it, someone might just increase the lead in the

saw until the saw no longer runs out of the log. Or the sawyer might try to hold the saw in the cut with the guides which will of course heat the rim of the saw and make it act like it doesn't have enough tension and eventually put a bend in the saw. In the meantime, all of those little tricks to misadjust something to compensate for something else, not only didn't solve the problem, but when someone like me finally does find the original problem and corrects it, the saw still won't run properly until I find everything else in the mill that had been messed with and improperly adjusted with the hope of compensating enough to get around the original problem.

Better yet, the next time you have any trouble with one of your saws, please just check the accuracy of the bits. Check for sharpness, squareness, missing corners, original hook angle and equal and sufficient side clearances. Oh, and if you have already seen your 40th birthday, please put on your reading glasses to be able to actually see what's wrong with the bits before you start replacing them. And if you have a normal amount of lead, keep your hand off of it. No need for an adjustment there.

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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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