## Samuilt Folow

BY CASEY CREAMER

## I have been having trouble with my saw. I suspected the sharpening was off, so I put brand new bits in, and now we have the same problem, but it is a little worse. What am I missing?

Back in the '50s and '60s when cars had carburetors and adjustable points, you could easily determine why your car wouldn't start. You had to figure out whether it was a fuel problem, meaning either a carburetor or fuel pump issue, or an electrical issue. If you were not getting any spark, you knew you had to concentrate on the ignition system. Now it gets easy. All you have to do is start replacing the ignition components one



Here is a new tooth fresh out of the box. How does it look to you?

at a time with new ones. Chances are only one of those ignition components is at fault so you could try replacing one, and if that didn't help you would put the old part back on and replace a different part of that system. What made that process fairly easy was that you could count on a new coil not being defective and a new distributor cap, or plug wires, or a new set of spark plugs not being defective. Basically what you were doing was replacing a component of unknown condition with one that was known to be in good condition because it was new. Sure, there were a few exceptions, but the percentages were so low that you could count on those new components almost all of the time.

Now let's get back to your sawmill and replacing the teeth. Before I talk about replacing the teeth, I want to talk about looking at the old teeth. Everyone who has ever dealt with me knows that I am a stickler for having properly sharpened teeth in your saw. I look closely at the teeth on every saw that I work on. When I am working on a saw while the customer is in my shop waiting and observing what is being done to the saw, as soon as I see that the teeth are not sharpened properly, I call the customer over and have them look at the bits to see if they can see exactly what I am seeing. They usually have no trouble seeing what is wrong with them as soon as they take a good look.

Having someone take a look at the bits and finding that they are surprised to see they are not properly sharpened is a fairly common situation. I can only conclude that a lot of sawyers out there sharpen the bits as efficiently as possible and, in the process, they don't bother to take the time to inspect the bits. Sawyers make

a lot of lumber without measuring every board, but somewhere in the process. somebody is measuring some of those boards to make sure things are going OK. No matter which tool you use to sharpen these teeth, you should always be inspecting at least a fair sample of them to make sure they are sharpened properly with the right hook angle and a straight and square cutting edge. And you should be inspecting them to make sure you managed to get them sharp enough. You just shouldn't run a sharpener over a set of bits and then walk away without giving them a serious look to see that the job was done properly.

So, in the case of this mill, they should have looked close enough at the bits to see if they were or were not being sharpened properly. If they were being sharpened properly, then there would be no point in replacing them just to see if that was the problem or not. In other words, those bits should be a known factor just by simply inspecting them. If they are not sharpened properly, then resharpen them and get it right this time. And if they were sharpened properly, then you can cross that off of your troubleshooting checklist for the moment. I say for the moment, because the next time you start to have any trouble you should first look at the bits all over again.

The next part is just as important, now that you have checked the bits and their condition is known. If it is time to replace them anyway, go ahead and do that. But don't think that because you replaced the bits with new ones you now have a known quantity. All you know is that they are new and have never been in a saw before. So what? There are a few big things that you don't know about



the new bits until you have thoroughly inspected them. Were they manufactured properly? Are they the right kerf? Do they have equal side clearance? Is the cutting edge straight and square? And even if they were indeed manufactured properly, what has happened to them when they were thrown into a box, and then shipped from the manufacturer to the distributor, and then to you? Do you think they are still as sharp as when they came off the production line? The answer to that is a big fat no.

As far as I am concerned, you should sharpen every new bit you put on the saw before you run it. And while we are on that subject, new saws come with a new set of bits. Don't think that you should take a new saw out of the crate and try to run it without first sharpening it. Who knows how many corners were nicked while it was being hammered at the factory? And the same could happen if it got rehammered at the distributor.

Of course, when you sharpen a new set of bits, I would like to think that you are going to make sure that you sharpen them properly, or else we are back to where we started from, with another unknown factor in trying to figure out why you saw isn't performing properly.

Interested to learn more from Casey Creamer? You can watch our video on how Casey hammers circular saws on The Northern Logger YouTube page. Just search for "The Northern Logger" on YouTube and click the video entitled "How to Hammer a Circular Saw with Casey Creamer." Please send future questions about sawmills and their operation to Casey Creamer, saw doctor and president of Seneca Saw Works, Inc., PO Box 681, Burdett, NY 14818, (607) 546-5887. You can also reach out by email: casey@ senecasaw.com.





