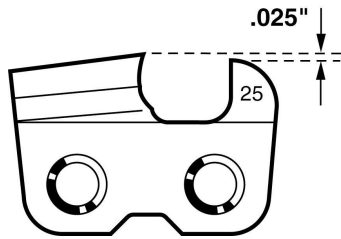


Depth Gauge Maintenance On Pro Saw Chain



Depth gauges, "riders," or "rakers," as they are sometimes called, control the amount of wood severed by a cutter tooth. During the life of a pro saw chain, they occasionally need maintenance for top cutting performance.

When your chain is new, its depth gauges are set correctly, but after a chain is sharpened a time or two, they may need maintenance. As you can see in the graphic, the top of the cutter tooth slopes back. Each time the chain is sharpened, the top corner of the cutter tooth gets lower. If the depth gauges are not measured and maintained, each time the chain is sharpened, the tooth cuts thinner and thinner chips. Eventually it won't cut anything at all.

Before you perform any depth gauge maintenance (lower them) you need to learn what the setting is. The image above is an Oregon brand cutter tooth. As you can see, the correct depth, .025", is stamped on the depth gauge. With other saw chain that lack this stamp, consult a dealer or manufacturer for information on proper depth gauge height. Knowing the correct height is important, because if the depth gauges are not set correctly, the chain is more dangerous to operate.

Frequently Asked Questions

The following are some common depth gauge questions and answers to them:

Q: How often should you shorten depth gauges on your pro saw chain?

A: After you sharpen the chain, you should check the depth gauges (rakers). If they measure less than what is recommended, they need to be shortened. If you don't pay attention to them, the chain will not feed, even when it's sharp.

Q: What about making a "hungry" chain by cutting the depth gauges low?

A: Do not cut the depth gauges too low. Oregon Cutting Systems recommends .025" for most of their professional saw chain. Low depth gauge settings require more power from your saw motor, shorten the life of your chain, cut rougher, increase operator fatigue, and increase the risk of kickback injury.

Q: Can I file depth gauges with a flat file?

A: Yes, but always file depth gauges (rakers) to their original round or ramped shape. This helps the cutters teeth feed smoothly. Smooth feeding cutters=Smooth cutting chain.

Q: Some guys count file strokes and take a few off each raker each time they sharpen. Does this work?

A: No this is a bad practice. Each file stroke does not take an equal amount of material from the depth gauge. While it might seem to work at first, each time you do it, the inaccuracy of method adds up. Before long the depth gauges are not even. Since you're not measuring, this is also a recipe for getting the depth gauges too low. This makes the chain dangerous to use.

Q: What happens if the depth gauges are uneven?

A: When depth gauges are uneven, each cutter tooth on the chain takes a different sized bite. This causes the chain to cut rough and vibrate. If the depth gauges are higher on one side than the other, this causes the chain to cut crooked. The cut will pull in the direction of the side that has the lower depth gauges.

Q: What is the best way to cut depth gauges accurately?

A: It is best to measure each depth gauge with a measuring tool. These tools are easy to use and ensure depth gauges are all the proper height.

Our Advice

Some pro saw users cut depth gauges too low. In most cases, this is an attempt to make up for poorly sharpened teeth. They think by making the chain more aggressive, this will offset the characteristics of dull and inefficient cutter teeth. This isn't the case. The fact is, you can't make up the difference -- and when you cut depth gauges too low, on top of bad cutting performance, the chain is more dangerous to use.

Pay attention to your chain's depth gauges. For help doing what many consider to be a tedious job, check out this link to the Silvey HDG-6.

Got questions about depth gauges? Call or stop in.

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