

Chain saw sharpening advice

By Martin Dickinson

Is your chain saw cutting to one side or do you just need some advice on maintaining your chainsaw?

*NB This article is based on some advice given to Stan by **Martin Dickinson**. It has been edited to make it apply more generally. Whilst it refers to Husqvarna saws the principles are broadly the same whatever the make of saw.*

The root cause of the saw cutting to one side is wear on the bar where the chain runs up against it. Do you carry out any maintenance on the bar itself? Do you turn the bar periodically either when you sharpen the chain or when you do maintenance on it? Chances are your bar has been kept in the same position for quite a while resulting in wear on one side of the channel guides.

Now is the time to get a Husqvarna maintenance kit. Keep the new bar and chain as spares. You will see that the kit contains a hook tool and a small flat file. Take the bar off the saw, marking which way it came off with a sharpie at the top of the bar.

Insert the hook tool into the groove behind the front sprocket then drag it towards the back of the bar and watch how much crap comes out. Do that three or four times until it slides along the groove as if it is new. Do that on both the top and bottom of the bar. During this you should notice the hole where the oil enters the chain feed in the bar. Make sure you clean that out as well.

Once that task is done look at the shape of the bar. Put a sheet of clean white paper onto the bench and you will see if the two sides that are parallel are even, get the file and take off any burr that is on the side of the bar top and bottom, then have another look along the bar. If you are not sure get a set square and run it along the bar keeping the stock side tight against the bar. You will probably see light from under the blade of the set square on one side of the bar. That is the cause of your saw cutting to the side.

Now go back to your days of metalwork at school and remember how you did polishing of surfaces by placing the file flat on the surface of the (in this case) bar then draw the file horizontally in both hands back and forth until you get both sides of the saw bar even. Once you have done that on both sides of the

bar take any burr off the side of the bar you have just levelled off. You're not finished yet!

Take the hook tool and run it through the groove to remove any filings, grease the sprocket with the grease from the maintenance kit and there is a small hole about 1.5mm each side of the bar at the back side of the sprocket, pump some grease in until it shows at the top of the bar – rotate the sprocket and do the same about three times. Turn the bar over and repeat the greasing action, you won't use as much on the second side.

Put your chain back onto the bar and the bar and chain back onto the saw. Adjust the tension of the chain with the bar lifted up from the front. Tighten one nut up to release your hand so you can adjust the chain tension, you should be able to lift the chain about ¼" up over, run the chain back and forth then re-check tension. If you are happy, put the second nut on to secure the bar and tension both up correctly.

While you are in the workshop, secure the saw in an engineers' vice and sharpen the chain. Then clean the air filter and housing. Before removing the filter brush out any fine sawdust with a 2" paint brush, blow gently to remove any loose material then remove the filter and wash it in warm soapy water. Dry it off with a clean rag and secure it and the housing. Now you will notice the arrow on the bar. Next time you sharpen the chainsaw turn the bar over but clean the groove out with the hook tool and you will see some of the muck that gets in there once cleaned.

Replace back onto the saw with the chain, secure the bar then tension it up and you are ready to go again. Rotate the bar a further two times then check the alignment of the sides by eye or with the set square. Remember that you have a new bar and chain sitting in the workshop but why spend money like that when you can prolong the life of the current one on the saw.

If you find you get movement in the cut to the side, it is the bar which requires maintenance as well as sharpening the chain. I rest my case and wish you many happy hours chain-sawing at your leisure.

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