

Stihl MS 441

An American reader requested a review of this saw way back in May. Here it is at last.

Before I even start with this article I have a confession to make. I really didn't want to like this saw. I know that being able to test these saws before they are released to the great and good of the world of commercial forestry is a privilege, and having an open mind is an absolute necessity, but sometimes things happen that threaten to make this difficult. Dealing with the mysteries of PR companies is something that forestry is fairly free from, and I'm sure if it ever becomes common practice I'll be off like a shot, because this common or garden contractor isn't equipped to deal with PR!

Consequently it was with a little apprehension that I unpacked the shiny MS 441 from its box and began to assemble it. I couldn't help grinning when I saw the 20" bar. As usual the manufacturers equate big bars with big performance. "Well, we'll see won't we," I remember thinking.

It was getting dark when I strolled across the yard and buried the long bar into the old sycamore butt in the corner with the intention of proving yet again I know better than the idiots who decide a 20" bar goes with a 70cc saw.

Not this time smart-arse!

A couple of minutes later the new Stihl was sitting ticking over among the sawdust it had just produced and I could almost hear it mocking me. "Is that all you've got?" it could have been saying.

I was quickly rooting through my stash of bars and chains and, with a 16" set-up fitted, I had another go at the big firewood butt in the yard – and the realisation was complete, I was not going to dislike this saw. I was going to find some big rough trees to fell with it in the morning. I couldn't believe it but I was looking forward to it, as long as it wasn't raining!

With the 16" bar and chain fitted the MS 441 is just something else. Forget the four ports, the stratified scavenging and the reduced fuel consumption and emissions: this is a superb saw in its own right. I must admit I don't like felling any more unless the trees won't fit between the harvesting head's feed rollers. The excellent MS361 that I use on the few occasions that I do any felling could do with a bit more grunt in trees like this. The MS 441 has this extra power in abundance and though it is longer and heavier and simply physically bigger, these things all seem to disappear when that fat power delivery comes into play on a big branchy roadside Sitka. It starts at about half throttle and just keeps coming. You can bury the bar into a big piece of timber and pull on the back handle as hard as you like and it won't give back. The torque the 441's engine produces is quite remarkable. Once the tree is down and the toes are off, brashing with the new Stihl is easy on a big rough tree because



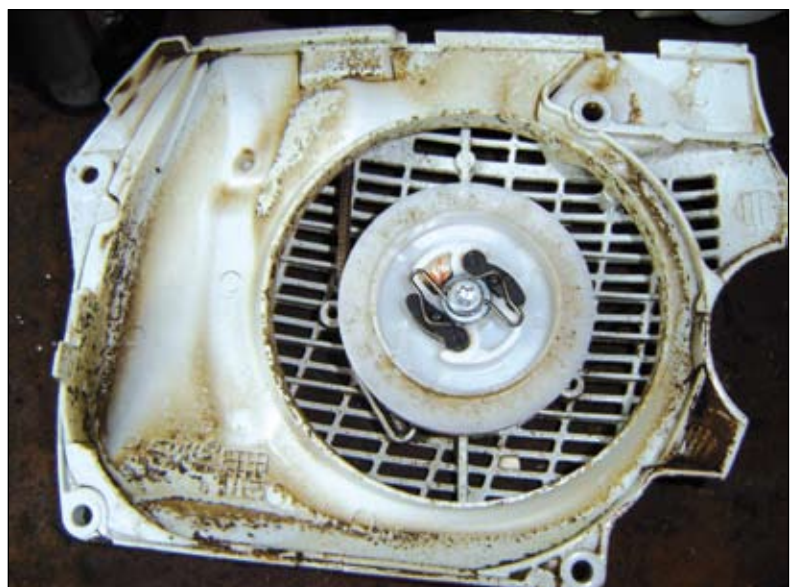
A big outside spruce – just what the MS 441 was made for.

of this smooth power delivery and smoothness is the next feature of note.

The MS 441's all spring AV system produces incredibly low vibration figures for a saw of almost 71cc and this is borne out when the saw is actually being used. Ralph is using an MS 361 that is well over a year old and the spring AV system on that still works effectively despite some pretty severe testing. The AV springs on the handle have a restraining wire inside that stops them being stretched to the point where they break or uncoil, and this seems to work well as this saw has had no replacement springs. In fact the only parts it has had have been bars, chains, sprockets and spark plugs. Even the filler caps have proved to be admirably durable and all these parts are common to the new saw. I think this is one of

the really good things about Stihl. I found a bar and chain that had been used on my MS 361 and it fitted straight onto a brand new saw that wasn't actually on sale at the time, and I won't even start about how good the bars and chains are because if you haven't found out yet you obviously aren't bothered.

The MS 441 is remarkably manoeuvrable with a 16" bar and it feels well balanced, and though it is a substantial piece of kit this is an easy trade off given the enormous performance. The results are on a par with a much bigger and heavier saw that would be using more fuel and would feel unbalanced with a shorter bar. I tried the 441 with the 20" bar and it didn't feel unusable, but the long bar isn't much good for dressing out. We have some 2 tonne average trees to fell on a job that is coming up shortly and I



(Left) Schematic showing how the centrifugal air cleaning system, which is new to Stihl, should work. The dirt sticking to the inside of the cover in the picture on the right shows that it does.

would feel confident tackling them with the MS 441 fitted with an 18" bar, or even a 16" at a pinch, whereas normally we would fell them with a big saw with a 24" bar and dress them out with smaller saws with 15" or 16" bars.

Looking at the pictures of this new Stihl you can see there are no badges declaring how much new technology the engine contains. The advertising leaflets seem to almost make a bigger thing of the new centrifugal air cleaning. Other saws have had this for years and anyone who has used Stihl chainsaws will know they have needed something like this. Stihl's system is a three dimensional one that ensures almost all of the large particles of dirt are removed from the air flowing into the airbox around the carburettor. The picture of the starter side cover shows that the housing that creates this cleaning action is shaped like a turbocharger body and the opening where the air is forced from the fan into this housing is carefully designed to maximise the effect. The amount of fine dust that accumulates in the inlet tract on most of the old O series Stihl chainsaws and the newer MS series machines can be quite alarming, although I must stress it doesn't do the engines any harm as the longevity of the MS saws we use proves. The big air filter that fits snugly down onto a substantial carburettor manifold assembly is also a new design that should be easier to remove and refit. It also provides a larger area of filter surface, and the small air passage at the top of the manifold assembly is part of the trick system that makes this saw such a step forward for Stihl. You can just see the red plugs in the tun-

ing screw access holes in the close up pictures of the carb assembly. It is obvious someone in the pre delivery workshop at Stihl decided nobody was going to tamper with the tuning while the saw was out on demo. This big complicated looking carburettor is similar to one that has been in use on one of Stihl's stone saws for some time and has proved durable in a much harsher environment than any average chainsaw should come up against.

I can also report that at tick-over the engine note is decidedly not traditionally Stihl-like. No sign of any trundling or having that just about to stall but never actually stops type thing. On a rising throttle and at full revs it sounds very reminiscent of an air cooled CR motor, with a clean tone and no limiter induced misfire as this engine runs to full speed unimpeded by electronics. This last bit led to a great deal of amusement when someone who should know better was roundly told off for standing outside his workshop and revving it just to listen to the music it made. His neighbours thought it wasn't quite so musical and he was almost nominated for a chainsaw related ASBO (and no it wasn't me).

This new machine looks like a restyled MS 440, and but for the 1 instead of the 0, that is all it appears to be. This is clever on Stihl's part. The 441 breaks the mould in that it looks as a chainsaw should. It is a single, well put together unit rather than a collection of functional parts like some of its recent predecessors, and it is the best looking chainsaw to come from Stihl since the Contra. I wouldn't presume to understand Stihl's marketing strategy but the lack of 'stratified scavenging' stick-



At last a sensible air filter, and after many hours of work it is still fairly clean.

ers and 'four port' badges possibly means they think that if people use the MS 441 they will decide for themselves how good it is, and I must say this works for me. More importantly the word coming from Stihl's technical people is that after several years in development and testing, the technological advances that have gone into the MS 441 will form the future of the power unit applications and as the design basis for their chainsaw range. This long development and testing process was brought to a successful conclusion with the appearance of

the TS700 stone saw that has now been sold for some time with an engine that is, for all intents and purposes, the one in the MS 441! Stihl have tested the merit of the design by 'sneaking' it out into a different market where it has been monitored and its reliability has been proven.

It almost makes me wish I was still young and fit enough to appreciate Stihl's new generation of saws properly but at least I can sum up the MS 441 like this: impressive – want one!

Simon Bowes

MS 440

Capacity 70.7cc
Weight 6.3kg
F/R Vibrations 4.2/4.5 m sec⁻²
Bar 16"-25" Chain 3/8"

MS 441

70.7cc Capacity
Weight 6.6kg
F/R Vibrations 3.1/3.3 m sec⁻²
Bar 16"/32" Chain 3/8"

The weight, vibration and the bar lengths are the only differences between the two saws. So tool-less filler caps, see through tanks and side chain tensioner are common to both the 440 and 441.



(Left) The complex carburettor is an integral part of the new stratified scavenging design. (Right) Red plugs in the air screw holes mean there's no tuning this demo saw!