



# Our plan was to get a 300 two stroke,

to compare with a 450 four stroke, but we did not quite get that right. We borrowed the Bikers warehouse 450 and the Storm Racing 250 2-stroke and went out for a mighty fine ride, AND THAT ... got us thinking. We'd try to fathom the difference

between riding a four-stroke and riding a 2-stroke.

So you want to buy a dirt bike? The biggest and best and meanest you can find right? Well sure – that's all good – but most of us mere mortals

out by todays modern machines - and what kind of riding are you going to be

We've had many a customer that suffers buyer's remorse - they get talked into the biggest baddest 450 on the planet and end up with more than what they bargained on. We see this, especially with the kids parents who are convinced into buying high performance two strokes, when their kids can barely change gears or whose feet don't reach the ground. For fast stuff, sandy riverbeds and great fun trait riding – a 450 four stroke will happily fit the bill if you are a fairly experienced rider. If you are into rocks and dragging bikes up and down Butches rocks at De Wildt... then, unless you are King Kong, a 450 is certainly not your answer. We always tell people – start smaller, get better, then, if you want to, go bigger. By then, you'll also have an idea of what kind of riding you'd like to do... BUT - and here's the rub. With the cost of bikes going up all the time, you need to find something that you'll be happy with for a good long while.

This explains why manufacturers like Husqvarna generally build all kinds of bikes of all sorts of sizes. AND, the Europeans have an extra arrow in their quiver in terms of their two-stroke lineup.

# 2-stroke Vs 4-stroke:

There are some basic things you need to know to choose the right dirt bike engine for your riding needs. We've written this lot to help bring to light





some of the basic pros and cons of both. Two of the main differences between 2 stroke and 4 stroke dirt bikes are the handling capabilities and power. However, comparing the two is equivalent to comparing oranges to apples in various ways. Just a NOTE Remember the Frames from most manufacturers are basically identical in every aspect and it is just the engine that differs in weight and character. On frames, the main differences are Rear linkage, no linkage suspension—then closed cartridge forks and normal valved forks can either can be set soft for enduro OR harder for MX riding. The engine is the thing that makes it all change.

2 Stroke Dirt Bikes: Pros and Cons Hopefully you read our engine story last month, so you'll know most of this – but combustion and compression are the two processes involved with two-stroke engines. The spark plug ignites and the engine fires one time every crankshaft evolution. The process is simpler than that of the four-stroke engine, making the 2-stroke lighter in weight and easier to maintain mechanically. Firing on every single revolution makes the 2-stroke dirt bike twice as powerful.

However, there are some cons of 2 strokes, according to most dirt bike experts:

Require a mixture containing premix oil

and petrol. Extra oil must be kept onhand, whether you have petrol or not. Tend to be smoker at start-up. Environmentalists and neighbours have been known to complain about this... we love the smell of 2-stroke in the morning! The power delivery of the 2-stroke dirt bike can be a bit unpredictable but this is often dependant on the type of pipe fitted as this is what determines the feel of the

Has a high-pitched buzzing sound some find annoying.

# Pros of 2 Stroke Engines

Fans of 2 Strokes believe that the positive aspects far outweigh the cons, including: Less moving parts make two stroke dirt

bikes much cheaper and maintain. This also makes them easier to work on than 4 stroke engine dirt bikes.

They're much more nimble and lightweight, making them easier to ride. The sound of these dirt bikes doesn't carry as far as 4 strokes.

Fans find the often unpredictable power delivery to be very exciting.

Modern 2 strokes have low down power delivery and a strong hi end pull so are suited to a wide riding style 4 Stroke Dirt Bikes: Pros and Cons Exhaust, combustion, compression and intake are what make up the 4 stroke engine. This dirt bike engines fires just one time every two revolutions. Its power delivery is predictable and steady. Because of this, the four-stroke is said to be an effective choice for rusty riders and beginners – unless you are on a modern big bore 450...

### Cons of 4 Stroke Engines

According to professionals, there are some cons of 4 strokes you should be aware of: Require a lot less maintenance that 2 strokes but are Costly when they do fail.



They are said to be extremely loud, making them annoying in neighbourhood settings - Unless you keep original factory exhausts...yea right!

There are more moving parts, which means that the 4 stroke is generally heavier with more parts to break. Riders looking for a more challenging ride complain that their power delivery can be too predictable.

### Pros of 4 Stroke Engines

These are some of the positive aspects fans of 4 strokes brag about regularly: Because the oil and petrol are separate, all you need is petrol to "fill her up." Four stroke engine dirt bikes are much more fuel efficient than the 2-stroke. Tend to last for a longer time in between major overhauls with the proper maintenance.

Motocross bikes with 4 stroke engines are very loud, but modifications can be made to bring down sound levels.

A modern 350 4 stroke will run with or pass a 300 2 stroke showing the gap has closed in the engine capacity race 2 Vs 4, with 4 having a much smoother power delivery.

### Our take:

The difference between the two stroke and four stroke internal combustion engines have tormented riders for years now, as all sorts of contradictions keep surfacing, leaving most of us still in doubt. This is due to the fact that each one has its own supporters who get defensive and are unable to keep their objectivity. MX 2-strokes are pretty wild, but then so are MX-4 strokes. But the European enduro 2-strokes deliver very user friendly power for clambering. But then - so do most of the modern enduro four-strokes. Add to the mix that all enduro machines come standard with a happy button and a side stand, we really are spoiled for choice. So we have now completely confused you yes?

Well us too. What you do need to do is ride both – four strokes are generally more



predictable – but the two strokes can be more exciting and definitely have the edge when it comes to the weight department.

### Heres an example:

extreme events.

The Husqvarna TE 250 (2-stroke enduro): 104.4KG's

The Husqvarna FE250 (four stroke enduro): 107.5Kg's

As four stroke technology develops, the bikes do get lighter, but the 2-strokes still tend to be slightly more compact, so the bikes feel slimmer and lighter.

In terms of power – a 300 2-stroke is comparable to a 350 four stroke and this is why you see so many 300's and 350's at

The Husqvarna TE 300 (2stroke enduro): 104.6 KG's dry

The Husqvarna FE350 (4-four stroke enduro): 109.2 dry

The Husky FE450: 113 KG's – almost 10KG's heavier than the TE 300 even though the frames etc are very similar. Interesting – and it might not sound like a lot – but when you are wrestling your way up a gnarly hill, it does have an impact for sure... but then you have to



go down the hill again - and that's where decompression or engine braking comes into play - the ability to use the engine to slow you down. Four strokes do it well - 2-strokes not so much...

But anyway...

The conclusion is really down to rider preference SO unless you test them both you will never really know. But choose a bike that suite your style of riding and don't count on what your mates tell you...

The 450 came from Bikers Warehouse in Malibongwe drive, what a fantastic bike – easy to ride and so much fun. You can go and test the Husky lineup on their 2.2 KM track right on the property.

## 0117954122

www.bikerswarehouse.co.za

The 250 came from Sandstorm Racing, the busy Husqvarna dealership in Centurion, this 250 is a race bike fully prepped – light, nimble and very fast. Pop in and say huzzit to Karel, He's been riding and racing the bikes since they arrived in SA.

(012) 653-0449

www.sandstormracing.co.za