

# Tuning work – MB Cast Reed, tune 230

## TUNING WORK MB OLD SKOOL 230 REED

In 1986 I was given a bike to build by a Mick Benson from Cleveland, it wasn't just the run of the mill bike rebuild it was a GP with side car and he wanted it water cooling from memory.

The bike was fully restored blue and built with the side car on and was sat in my workshop when it was set on fire and everything was burnt to the ground including the bike and side car. It was a total write off. When it came to the insurance claim he didn't get a penny because he said it had a chrome crankcase side on the engine and the insurance company said that was customising!

I was left with nothing but scrap, but from memory I helped Mick out and built a solo bike for him in a totally new MRB design, he had the first of a few I did in the early 90's.

This is the cylinder off the bike I built and it's still running today.

But it is part of history of Scootering as well, this engine had the first 18mm gudgeon pinned crankshaft that I made using a Suzuki TS250 con rod and piston. The rod had a massive big end bearing area so the casing had to be welded and scooped out to work. The rod was 120mm so needed a big packer welding onto the cylinder face, then using the TS250 piston and this is one of only a hand full of stage 6 tunes Ive ever done and it worked well.

It was balanced well and was a pure joy to ride, it had a 30mm and MB Clubman with 5.22:1 gearing and it pulled and revved at the same time and this style of engine set standards still used today by MB and often copied.

Well eventually the crank cracked in the normal place where a standard crank with a good rod conversion always cranks and the engine and bike ended up in someone else's hands where I was offered the engine back which I resold to another good customer from Goole who had been a customer from 1985 and he still is.

As with lots of my old customers they come and go but always return year after year because they know I look after them and they know I know my business, it's a pat on my back after 27 years. Any way this customer has come and gone and I mean it, he's left the country on business loads of times and has come home to do a scooter or two and I've done all his engineering and tuning for each one.

This engine is no exception, it's like a yo yo in and out, a new crank, a rod kit a piston etc well it is over 24 years old and it's been used.

Today it's on its last over sized piston, when you do an oddball engine with long cranks and welded packers your stuck with what you have, the casing was still in good nick so the customer wanted to use it again. Which left us

moving away from Mitaka pistons back on to the much stronger Wiseco type so we could do a MB shorty Reed conversion to it, re alter the porting to suit and modify the piston to reed design.

But as it's on the last over size we decided to Ceramic plated it to avoid wear and give less friction..... Well that was the plan!

I sent it for ceramic plating and it got returned with a note 'sorry we don't do Cast Iron cylinders anymore!' Ouch and all that work that went into it! Dam Dam and bugger, what to do? Well me been me made a few phone calls with contacts in the racing game and eventually got to talk with a MD of a engine manufacturer who specialised in racing engines using iron or steel liners! After a long conversation where it started 'sorry we can't do it either' I was getting a bit fed up, dreading phoning my customer to say he's wasted money and I'd wasted my time. But this guy must have felt sorry for me after listening to the whole long winded story and finally 'said Ok I'll try it but no guarantees'. Fine for me.

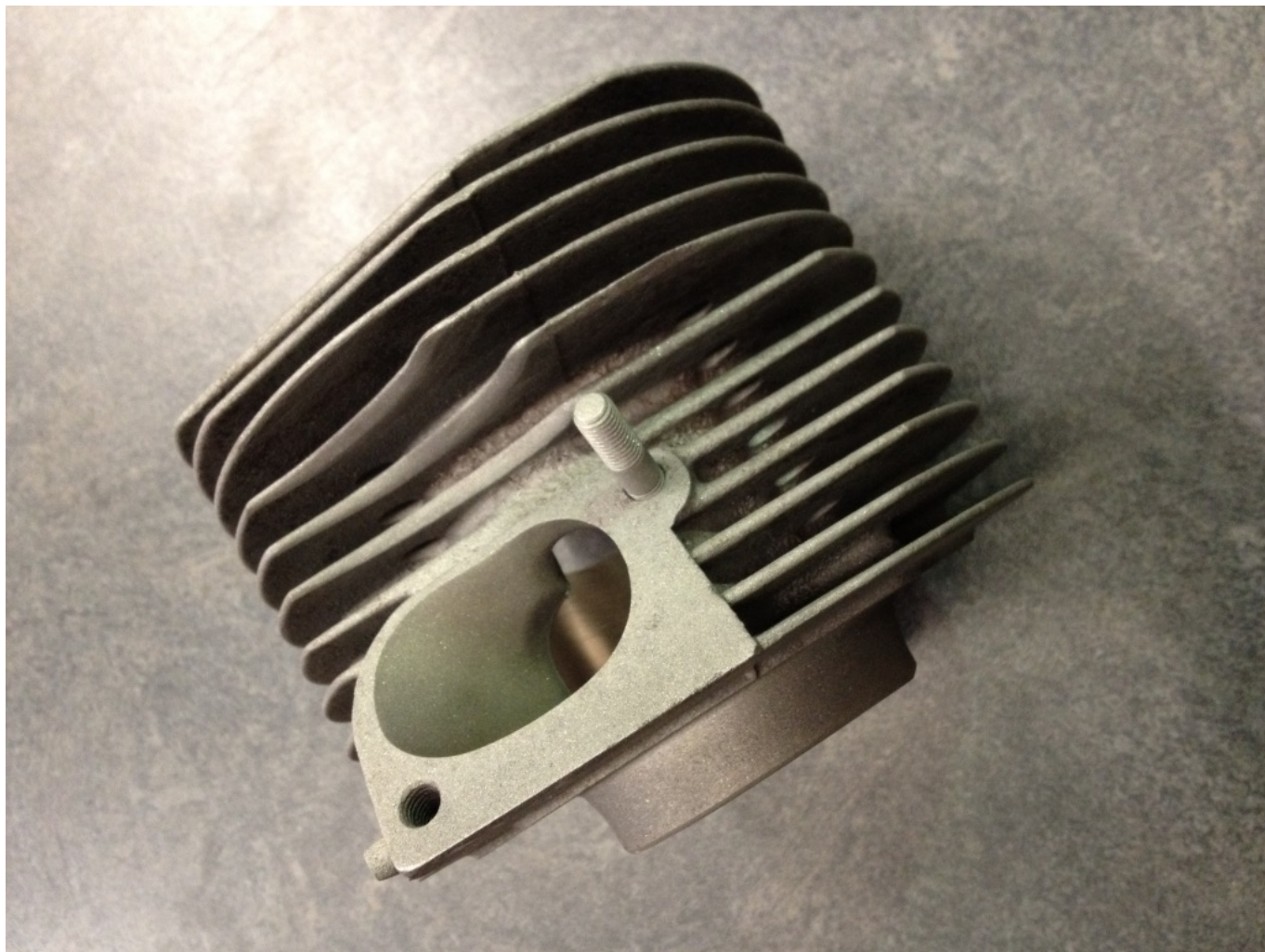
Nothing to loose, the cylinder was sent off and returned 2 weeks later and to say I was impressed is an understatement, when we opened the box the cylinder had been house brick blasted, not a problem there if that's what needed doing to get the plating to stick.

The whole cylinder looked plated. Now the funny thing was, well not really, all the ports was house brick blasted as well, the bore was perfectly honed and it came back with a sheet showing all measurement points. If you look at all the early porting photos before plating it shows all the hard work I did in polishing. Great I've got to do it all again! The real funny thing was, just before I sent it away the roof leaked right above the cylinder in the open workshop and left a rusty mass so now it's been polished an extra 3 times!

Is polishing worth it? Maybe and maybe not, if the customer wasn't bothered and I didn't set the highest standards I could have let it go after plating and I wish I did..... I HAVE NEVER KNOWN A CYLINDER SO HARD! That plating is the hardest I've ever had the pleasure of re tuning, polishing and cleaning up, I could only cut through and polish it with grinding stones. And I think I may well be using this process again.

After I was happy with it all polished up again it was time to address the MB Shorty Reed Block as the customer was using a 35mm TMX and we didn't have mounting rubbers to suit. Not a problem.... I had been thinking of a new idea with a flat flange where I can use various flange rubber mounts to get a carb from 22mm to 38mm to fit. An hour later I had made the new MB Reed flange. And that's it, it's all re worked and ready to go again 24 years later be it with a fin or two missing it should do what the customer wants 20+bhp with high fuel economy.



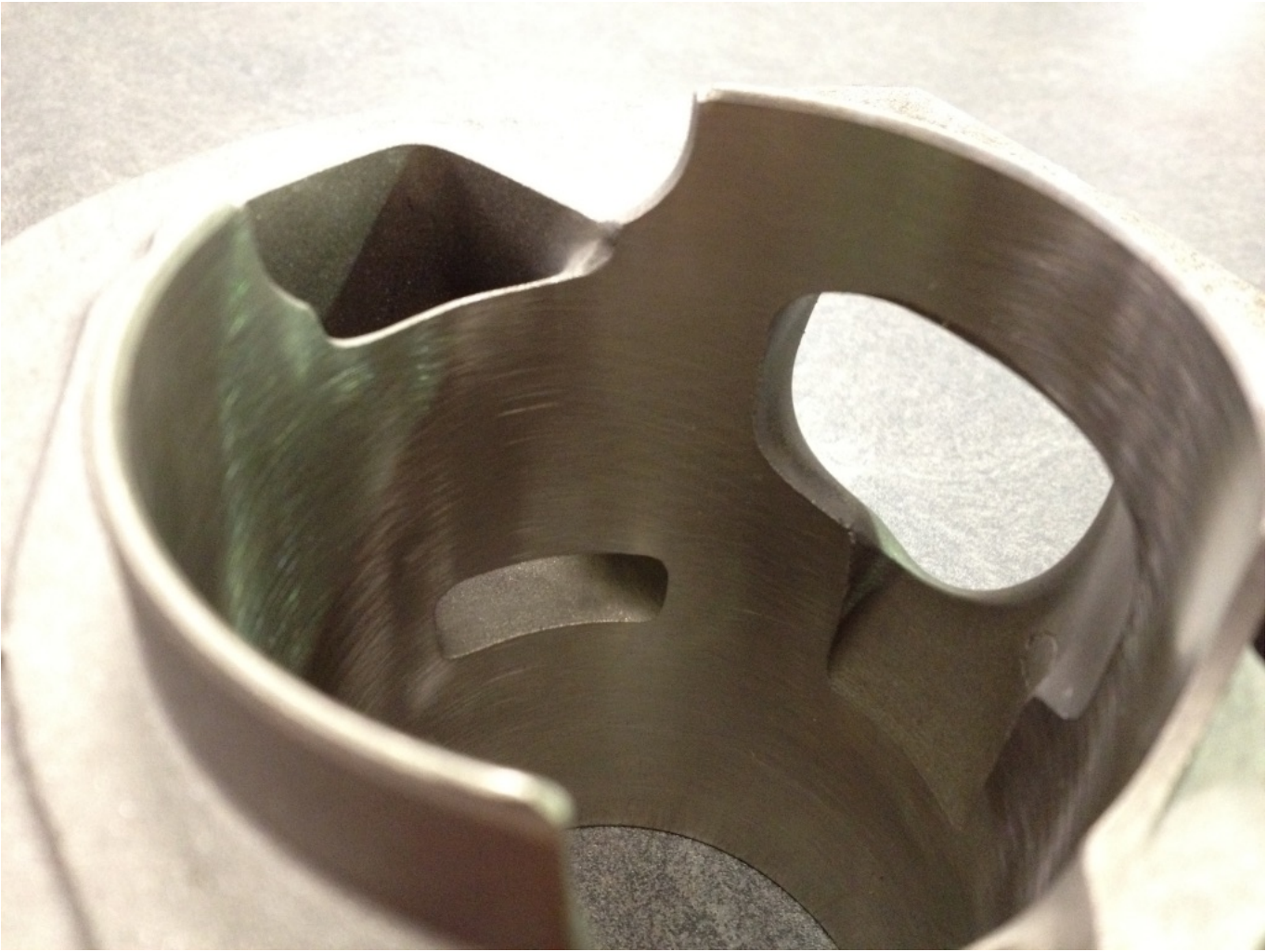














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