What do you do when your Le Mans burns itself to the ground? Buy another one and then spend the next 30 years making it faster and 50% more powerful.

Words: Luke Brackenbury **Photos:** Paul Bryant

John Benham is used to working on 6000bhp, two-stage, fast-revving diesel engines – the sort found in trains, submarines and very large boats. When we say working on them, the self-taught metallurgist and engineer studies them for MAN to find out why exactly they self-destructed. He shows us some pictures over a brew – it's fascinating stuff.

But the real reason CMM has come to a picturesque village just outside of Colchester is to see the 49-year-old's Moto Guzzi Le Mans Mkl. This 1978 example first came to our attention earlier in the year when we heard it at one of the popular 'Test and Tune' days, held throughout the year at the North Weald airstrip.

Local to John, the quarter mile strip is where he gets to unleash his 90-degree V-twin. Tucked behind the aftermarket glass fibre fairing (painted in metal flake by John), the slight-built man was producing 11.23/122mph runs – impressive on many (decibel) levels.

John has owned this bike since 1981 and it isn't his first Le Mans. "My first one, bought in 1978, caught fire," he explains. "I'd had it for 18 months and while riding on a country road there was quite a bad electrical fault."

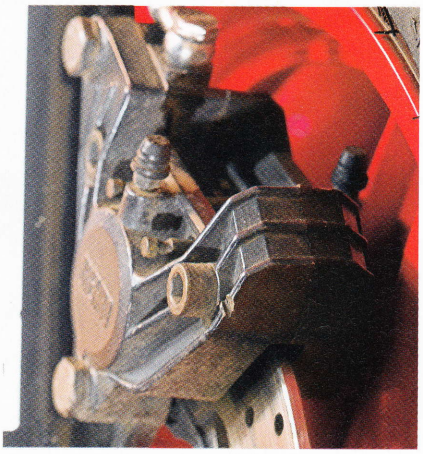
Most riders would be deterred by a spontaneously combusting motorcycle, but not John. In 1981 he found his replacement Mkl in the form of a three-year-old bike with 4000 miles on the clock, and 30 years later it has given him equally as much joy on the road as in his workshop. "I loved the Le Mans, so wasn't put off in getting another," John explains. "Maybe it is selective memory, but the new bike was never quite as good as the first."

As the old one was destroyed by the electrical gremlins, the first thing John wanted to get for the new bike was a full fairing: "Apple Motorcycles was a Guzzi dealer that designed and sold these fairings," John explains. "When I got the replacement bike the dealership had closed, but I managed to track down the guy who had the moulds and he made me another – so it was the last one ever made."

The replacement fairing was also doomed – destroyed when a car pulled out on John, knocking him off the bike. Ever resourceful, John had a local company rebuild the fairing remains to a standard that a mould could be taken and a single skin, light weight version could be made. At least he has the moulds now.

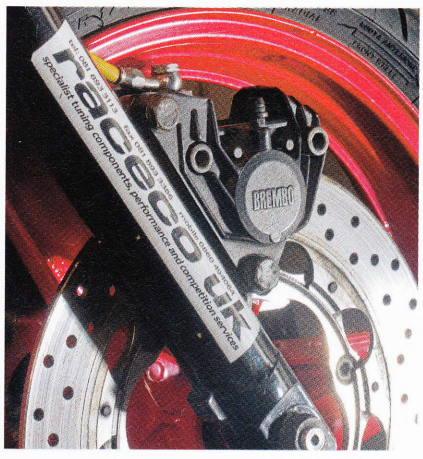
After attending a round of the Ultimate Streetbike series in 1984, the drag racing bug bit John hard and he's been doing it ever since in various road-going classes.

"It was then I wanted to find more power," says John. "The Le Mans motor had a reputation for being strong and Dr.



Standard Brembo two-pots are boosted by braided lines and bite down on to replacement discs from All Bike Engineering

The Guzzi eagle or a phoenix from the flames? John's first Le Mans was cremated after an electrical fault



Standard forks are prone to leaks, despite being sealed units. Replacement 38mm Marzocchis sprung new life into the front end

The quest for a sub-11 second quarter-mile will not come at the cost of practicality; pillion pegs, centrestand and luggage rack remain

John (Wittner – a very talented American dentist who built and raced Guzzi specials before working for the factory) was producing trick parts to get more power."

For 25 years, the engine from this MkI lump has barely been left alone; first came a re-worked standard cam with higher lift and longer duration along with replacing the 36mm carburettors with the 40mm items used on the MkII Le Mans. Not satisfied with the performance gains, a 948cc big bore conversion went a lot further. Between quarter mile sprints, John was still racking up the road miles, which caused problems for the performance upgrades.

"I had two Dr. John RR3 cams from Raceco UK," says John. "The first one was a standard one welded up and reground; after 5000 miles it cracked across the lobes so I was pushed towards a billet item, which at £350, was not cheap.'

Though much stronger, it became pitted on the lobe after two years and with metallurgy a big part of John's day job he soon realised that poor quality metals were the cause. John tells us: 'I studied them and thought, "I could make a better one."

So he did, starting with billet and developing his own cam profiles. Next to go in were 47mm inlet and 40mm exhaust valves, again from Raceco, which John (again) thought didn't make much difference. Work on the engine then took a six year sabbatical before the 1105cc conversion.

John had managed to source the last four of a batch of 95mm Wiseco pistons for the Guzzi and by that time had

OWNER: JOHN BENHAM

John, 49, has owned this Le Mans for 30 years and almost gets the same buzz from ironing out its pitfalls and designing and making his own tuning parts as he does riding it. His next project is to build a home-made inertia dyno, just to make the job of measuring the changes of cam timing less anti-social.

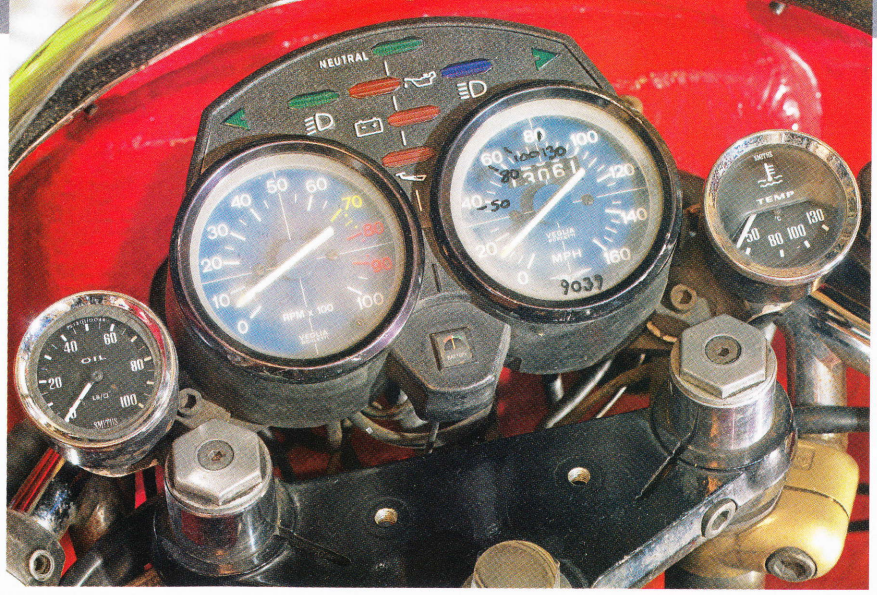
developed his own iron cylinder liners. The round-barrel Guzzi engine was up to maximum capacity, with only 1.5mm clearance separating the giant pistons from stripping the threads from the cylinder head studs.

"I could have stroked it to go further, but bottom end punch wasn't exactly lacking," John explains. "Unfortunately, the first two pistons partially seized. I thought the clearance was to blame, so I made a couple more barrels and then one of the last two pistons cracked in 2009," says John.

Back to 950cc again, John investigated the problem, which transpired to be a ring gapping issue. In order not to waste the rare pistons, John carefully re-machined the scuffs and resurfaced them to 94.3mm and made new barrels to fit.

One of the few advantages that John cites of working in a country with a shrinking manufacturing industry is the occasional bargain it can throw up; 12 years ago John picked up a lathe for £11.35 from the company he worked for – the equivalent price of a tonne of scrap metal at that time and the best money he has ever spent.

Aside from the full fairing, at first glance John's Le Mans looks standard; the side panels still state an 850 cubic capacity, but have neatly been cut away in order to make way for the huge K&N air filters that suck air into the Dell'Orto carbs. Also gone are the stock, sealed cartridge



Tucked below the aftermarket fairing, the speedo is the dial that is looked at the least

36mm forks and replaced with a pair of 38mm Marzocchis while Koni 'Dial-a-Ride' shocks plushly prop up the rear end.

Another huge engineering task was getting the Honda CBR1000 17-inch wheels to take the place of the standard multi-spoke 18-inch items, especially converting what was a sprocket-driven rear wheel to shaft drive. The result looks a factory fit and allows John a choice of wider modern radial rubber, but more importantly saving weight and reducing inertia.

The aim of all these modifications is for John to regularly run an 11 second quarter mile time, still in road trim. He's close and knows that he could probably save 40lb if he spent a day taking all the road kit off and removing one of the front discs, but that's a lot of effort for a Sunday and then get the bike ready for the ride to work again on Monday.

With North Weald days being few and far between, John admits that testing his modifications on public roads on the way to work is far from ideal: "I've got plans to build my own workshop inertia dyno," he says straight-faced.

We've no reason not to believe him. John continues, 'It would work by bolting a steel disc in place of the rear wheel. I've done my sums and it's definitely possible and it will make things a hell of a lot easier when it comes to playing with cam timing.'

John has got nothing against modern bikes or new Guzzis, but finds they don't give him the same satisfaction. So what is it that John enjoys so much about the Le Mans?

Touring, all-year commuting and the drag strip; 30 years and still going strong