

NEW CARS – THE OX7 SUZUKI

by Jerry Sturman



Simon McBeath/everleyphotography.co.uk

The OX7 ascends Gurston for the first time

Most sportsmen in their early to mid sixties tend to be past their peak, or at least think about slowing down a bit. This (quite literally!) doesn't seem to apply to those involved in motorsport which, whilst it may not require the sort of physical effort involved in more athletic activities, certainly still involves high levels of the sort of sheer determination and application necessary for success.

John Oxborrow is a case in point. Now 63, the man from Seaford on the Sussex coast has been building and racing cars since he was 18 years old. And with the total now standing at some 40 vehicles, that approximates to a new car every year and he shows no sign of slowing down.

'I've been building cars all my life,' says John. 'I built the entire car at home, every part except proprietary items like brake calipers and driveshafts, right down to the final coat of spray paint. Simplicity and light weight are always the key features.'

Amazingly, this is achieved without the sort of communications technology that would nowadays be taken for granted by just about everyone. 'I don't have a computer, or even a mobile phone. The cars are designed on a drawing board, the same one I used to use for my 'day' job – designing houses.'

In that respect he has something in common with Adrian Newey, but even the world's most respected F1 designer hasn't matched Oxborrow's prolific output.

'I always build new cars in the winter months and they usually involve six or seven months full-time work. I've built around twelve to fifteen Formula Fords, a similar number of karts, seven road cars and two 2-litres with slicks and wings.' He has also had a pretty successful ongoing career racing them. 'I started racing in Mini Sevens, then competed in my own FFs against people like Damon Hill, Johnny Herbert and Johnny Dumfries – who never actually beat me!'

After such a long career on the circuits, John decided he'd like to switch to hillclimbing: 'At least you don't get involved in other peoples' accidents, which can save a fair bit of work!' His sole previous hillclimb experience was at his local hill, Ditcham, when he was 18. 'I finished up against a tree and I've never done a hillclimb since!' He went along to Gurston Down a couple of times in 2012 to

get an idea of the lie of the land, chatting to a number of drivers and constructors before retiring to build his latest car, the OX-7 hillclimber, which he shook down at Lydd kart circuit in March and wheeled out in public for the first time at this year's Gurston test day. 'Although strictly speaking it should really be OX-40, I decided on OX-7 as I was born on the 7/7/1949!'

"I've been building cars all my life ... simplicity and light weight are always the key features"

Oxborrow's first hillclimb challenger, a 1000cc bike-engined single seater, is a real 'minimalist' machine and beautifully built to his usual high standard. With a very short wheelbase of just 75 inches the car appeared without wings at the test day, when the accompanying pictures were taken. 'Light weight is always the aim,' said Oxborrow, 'anyway wings complicate the car cover on an open trailer!' The car is basically of square steel tube construction but with no cross-bracing. From the driver's bulkhead forward it has a 1.2mm aluminium skin bonded on to effectively

The constructor - John Oxborrow prepares to test his latest creation



No concessions for comfort! The sparse cockpit area showing the road bike instrument cluster on the steering wheel

turn it into a 'semi-monocoque'.

Power is provided by an absolutely standard water-cooled Suzuki K6 from a road bike, but with a baffled wet sump and curved, horizontal, rear-mounted radiator from a Honda 600 road bike. Fuel is supplied from a one-gallon fuel tank via a standard bike electric pump fitted inside it. The engine and the inboard radius arm mounts are supported by a separate steel tube subframe at the front and a box section at the rear. Rather than the more usual rearward location, the silencer is mounted on the side of the car and is forward facing as it's easier to mount it that way.

The conventional coilspring/damper suspension runs 100 lb springs with no anti-roll bars and with all parts on this superbly finished car plated and anodised, the wishbones are of standardised 'OX' pattern in 18swg round section CDS tube, gusseted with removable plates at their apices to carry the pivot bolt for the outboard rose joints, which are screwed into the uprights. There are separate toe-in links at the rear.

The uprights themselves are fabricated from 14swg rectangular tube and carry HiSpec twin-pot calipers at the front and single at the rear. Oxborrow has nothing but praise for the service provided by the Dartford-based company, who also supplied the suitably modified road car discs. He's similarly impressed by Brand Mechanical Engineering of Aston, Birmingham, who supplied the unequal length driveshafts to his design, which incorporate Metro CV joints with a chain drive via a Quaife differential.

The minimalist theme continues in the cockpit where the driver sits on the floor, with no seat and just an anodised aluminium bracket to prevent sideways movement. 'You don't need any more than that – I'm used to karts!' says John. Uniquely for a car, the instrument cluster with its tacho and digital display is straight off a Suzuki road bike and mounted on the steering wheel, the basic loom being supplied by BSD of Peterborough. Another company which John rates highly, BSD also supplied the modified bike slipper clutch which proved slightly problematic at the Gurston test day until Oxborrow subsequently modified the pedal ratio. The lefthand gearshift for the sequential 'box has a single straight rod linkage for simplicity. 'No paddle shifts here – this works well!'

The tiny car sits on 8 and 10 inch aluminium alloy/magnesium Spectrum wheels supplied by Mike Barnby's company, and runs BMTR's softest possible compound Avon hillclimb tyres. 'I don't know the car's actual weight,' says John, 'but the car's as light as I can possibly make it!'

After a couple of inevitable teething problems at the test day had been solved, the car arrived at Gurston on 20 April for its first competitive event. Running within two seconds of the class leaders was a pretty good result for



Neat front corner in typical 'OX' pattern



The rear end, showing Quaife diff, Metro driveshafts, fabricated rear upright and convex Honda 600 radiator

this brand new machine's debut – not to mention what was effectively the first hillclimb event for the long-time circuit racer. However John was not entirely satisfied with the stability of the short-wheelbase machine on what, for him, was a fairly narrow road and, perhaps inevitably, finally had to accept that a set of wings would be a definite improvement!

So that's the next item on the agenda for this innovative constructor and once equipped, we could well see the diminutive OX7 right up amongst the front runners in the competitive 1100cc single-seater class. ■



Nearside engine bay with combined radius arm/engine mounting



Offside engine bay and forward facing exhaust outlet