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**moleracing**



## 2012 Event report 1. Winter development, shakedown and British Sprint Championship round at Castle Combe

Before last years season had ended, I decided to commission SBD Motorsport to build me new cylinder head and I raided the savings reserve funds. A few months I was excitedly unwrapping the box to reveal lots of shiny new bits and a 293bhp spec head.

The other plan in this strange world of the "How can I go quicker game" that we play, was to look hard at the weight of the car and see if this could be reduced. After much planning, and bearing in mind it didn't weigh much to start with, a grand total of 13.8kg has been removed to leave the car topping the scales at 393kgs with just a driver and 3kgs of fuel to add! I've managed to drop to around 11st/70kgs also by moderating the crisps, beer and cheese over the winter- but not too much; these are the essential foods of life after all.



The savings has been across multiple areas, each one contributing a little. The big move was to thinner brake discs from 10 to 7mm and the removal of the mechanical water pump, meant that 3 heavy pulleys and a long timing belt could come off, saving 2.8 kgs and replacing this with a tiny bike engine water pump at 300gms.

There were pockets machined in anything that didn't move, bolt heads chopped off if they protruded past the nuts, k-nuts put in for normal nuts, custom fabrications to replace Ford plastic parts, even a plastic cam cover saved 1.2kgs over the old aluminium one!



A new set of carbon fibre front wing end plates and high downforce front wing second elements from Hansell Composites have improved front end grip. For rear end downforce, we have a complete set of new diffuser tunnels, thanks to new moulds from Martin Pickles, and John Hansell and sponsors TEW Engineering. These are lighter and better engineered than the old tunnels and give a balanced lighter package all round.

So with a full rebuild, the car was completed enough to run at a shakedown test at Blyton park in early March.

I was joined by 3 other racing cars - Dave Hunter, who at 74 years young was trying to extract more power from his 2 litre zetec engined racing car, Martin Pickles in his new Jedi, purchased late 2011 and is so immaculate the only job he could find to was replace a few slightly tarnished washers with stainless steel ones, and Jonathan Toulmin shaking down his bike engined Force as a warm up to a full British campaign sharing it with John Payne.

Martins car sounded glorious running well over 11,000 rpm - but with no exhaust system! - it exploded on the back straight showering the track in carbon fibre, wadding and steel. I didn't know this at the time I did my lap and had to avoid the bits and ended up in the gravel trap distracted!

Dave had a few spins but enjoyed himself. Unfortunately Jonathan put a conrod through the block and fully lunched the Hyabusa engine - not a good start to the season, but he has a spare racing car to play with so don't feel too sorry for him!

The first actual event was a full 100 entry meeting at Mallory Park. I was pleased to set a time almost 4 seconds quicker than last year and also break the outright course record to take FTD (Fastest Time of Day in speed event parlance!). Some worrying clutch noises had started though.....



The next stage of the preparation was part of Martins Stag day - which I organised in my capacity as best

man (and photographer!) I'd arranged for us two and Mike Musson to spend 3 hours at the Cranfield GPR simulator for driver coaching, running Castle Combe in the virtual world. The simulator has full sustained G cueing with inflatable bladders all around the carbon cockpit simulating the G forces from the sides, the braking, the bumps and everywhere including gearchanges. Full surround screen projection and sound and it is possible to dial in 6 levels of car from formula BMW to F1. Apart from me getting very motion sick, it was a valuable learning experience and something we shall repeat.

*Photo by Scott Boulter at Mallory*



For Mike, all the winters preparation on his new 720bhp/550kg Pilbeam was lost on this first round of the British Championship at Castle Combe the following weekend, as on his way to the circuit his trailer collapsed and it took about 7 hours to get home! The rest of the full contenders made it - including Colin Calder and daughter Heather in a new car for '12, making the 4 day round trip from

Thurso - a few miles south of John O Groats! They had never driven the car or the circuit so it was a real baptism of fire for both of them.

The day dawned cold and misty but this soon burnt away to reveal a hot beautiful spring day at this excellent circuit. Practice was run over 2.75 laps - 5 miles, and a time of 3.5 mins surprisingly left me 1<sup>st</sup> in class of 9, but wasn't to last!

There were 6 SBD cars all together in the paddock after some cunning rearranging of the numbers over night! Bill Gouldthorpe - also 74 had a great first outing in his brand new car to qualify 12<sup>th</sup>. Steve Broughton and Mark Smith in the SBD works car had a really tight battle with Mark, piping Steve by a few hundredths for 3<sup>rd</sup> and 4<sup>th</sup> overall. Here Matt and Craig from SBD are fine tuning the handling of the Westfield.



I decided to save the brand new tyres for the 2<sup>nd</sup> timed run and hopefully the run off if I made the top 12. 123.48secs was a new PB and 9<sup>th</sup> overall, not bad considering there were 8 V8's, 9 2 litre cars and a similar number of bike engined machines all competing for the top 12.

So, brand new tyres courtesy of K2 Consultancy were fitted and it was time to scare myself further and apply the lessons learnt on the simulator! It may well be the 8 months of not driving, but I confess that the speed of entry into the corners was frightening and I was constantly braking too early - self preservation instinct kicking in that I must temper as the season develops!

An incident then happened that I was very lucky not to totally destroy the car and perhaps myself.



Photo by Steve Kilvington at Castle Combe

The first lap went well, tidy and committed, but as I came around the start finish straight for the 2<sup>nd</sup> lap I kept the right foot in and the speed built up to 140.7mph (228kph) and at the bump on Avon Rise a shim pack that sets rear wheel camber came loose and fell off the car. I now had the rear wheel fully attached, but with 20mm of angular play, and of no use whatsoever. I didn't know this at the time!!!

Under braking at Quarry, the car squirmed violently left and right, but enough speed was scrubbed off to turn in and accelerate out. Again, the car jinked left and right – not normal, something seriously wrong, so I aborted and parked up to live for another day.

There wasn't a run off as the 6pm noise curfew cut in, so points were awarded in qualifying positions. I ended 10<sup>th</sup>, 0.11 behind Heather, with Scott Pillinger scoring well another tenth ahead of the Calder's V8.

The car is currently in this form – sorting out a clutch issue, but will be fully repaired for a shakedown at Curborough this weekend and then the next round at Snetterton in June.

Steve



British Sprint Championship 2012 Top 12 after round 1 of 12		
Stewart Robb	4.0 Pilbeam-Judd MP88	12
Terry Holmes	3.5 Lola-Judd ERH	11
Mark Smith	2.0 SBD Reynard	10
Steve Broughton	2.0 SBD Reynard	9
Graham Porrett	3.5 Lola-Judd ERH	8
Terry Graves	3.5 Gould GR37	7
Colin Calder	4.0 Gould GR55	6
Scott Pillinger	2.0 DSP SBD	5
Heather Calder	4.0 Gould GR55	4
Steve Miles	2.0 Van Diemen RF96mm11	3
Dave Pillinger	2.0 DSP SBD	2
Bill Gouldthorpe	1.5 SBD OMS CF08	1

2 Litre Class 2012 after round 1 of 12		
Mark Smith	SBD Reynard	50
Steve Broughton	SBD Reynard	49
Scott Pillinger	2.0 DSP SBD	43
Steve Miles	Van Diemen RF96mm09	41
Dave Pillinger	2.0 DSP SBD	40
Tony Jarvis	Reynard FVL	38
Martin Webb	Reynard FVL	36

Remaining Events 2012		
22 July	Curborough	Staffs
2 June	Snetterton - BSC	Norfolk
3 June	Snetterton - BSC	Norfolk
9 June	Pembrey - BSC	S Wales
10 June	Pembrey - BSC	S Wales
30 June	Kirkistown - BSC	N Ireland
1 July	Kirkistown - BSC	N Ireland
28 July	Kames - BSC	Ayrshire
29 July	Kames - BSC	Ayrshire
8 September	Madeira Drive	Brighton
22 September	Brands Hatch	Kent
6 October	Anglesey	N Wales
7 October	Anglesey	N Wales

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