



**W S C C**  
WESTFIELD SPORTS CAR CLUB

## **A Beginners Guide to Sprinting and Hillclimbing. The W.S.C.C. Speed Series 2006.**

The W.S.C.C. Speed Series is for anyone interested in motor-sport, with suitable categories for all degrees of driver experience and car specification. From first time novice drivers through to experts, including lady drivers. Awards are presented for various achievements throughout the year. "Extra Curricular" trophies are awarded to competitors deemed to have made an extreme effort at a specific event. e.g. Lap Records, F.T.D's, Entertainment Value and triumph in the face of adversity.

***The camaraderie, enthusiasm and spirit has been excellent for all previous seasons, since commencing in 1998, long may it continue. The W.S.C.C. Speed Series is well known in paddocks throughout the country for it's friendly and helpful competitive spirit.***

Very little modification is needed to ensure that a Westfield is ready for competitive track action. You will find varying degrees of car models and specifications. With a wide class structure base we are able to accommodate all variants, from standard road-going (car engine or bike engine) through to fully modified cars running slicks and wings.

The Speed Series is predominantly Westfield based with the clubs specific knowledge encompassing all variants in suitable specific classes to ensure a well balanced competitive championship. The championship is also open to all kit / sports car variants, single seaters and saloons.

The Championship competes at many events throughout the U.K – every individual may enter as many or as few as they wish to suit their own circumstances and location.

Many cars are driven to and from circuits alongside those that are trailered to suit each and every individual's choice.

The items noted below are just a few simple and basic guidelines to look at and assess for yourself :

### **BASIC REQUIREMENTS TO COMPETING IN SPRINTS AND HILLCLIMBS.**

1 - You will need to be a member of an MSA affiliated car club (For example, The Westfield Sports Car Club).

#### **2 – COMPETITION LICENCE**

You need an MSA Competition Licence (B) (National B, non-race licence = approx. £32.00) which is obtained from The Motorsports Association Ltd., Motorsports House, Riverside Park, Colnbrook, Slough. SL3 0HG. (Telephone: 01753 765000). The MSA is the governing body of all motor-sport in this country. Upon obtaining your licence you will also receive a copy of the MSA Competitors year book known as "The Blue Book". Various chapters of which you will need to refer to. Don't be frightened of all the facts and figures, just refer to the relevant chapters and apply some common sense. *It is a veritable plethora of useful information.*

### **3 – CRASH HELMET**

A crash helmet to the appropriate Test Specification. (prices usually start from £70) Your crash helmet **must** bear one of the following standards:

B.S. 6658-85 Type A      **(Type B (a motorcycle spec) is NOT acceptable)**.  
B.S. 6658 Type A/FR      (this has a fire resistant lining )  
Snell SA95, Snell SA2000,  
SFI Spec 31.1, and 31.2  
SFI Spec 31.2a, and 31.2b.

***EURO EEC Specified Helmets (typically marked E22) despite assurances you may get from motorcycle stockists are NOT acceptable for Motorsport.***

Helmets are carefully checked by the scrutineer at every meeting and must be in sound condition, a good fit and without damage to shell or securing straps, otherwise they will be Withdrawn for use and retained by the Chief Scrutineer until the end of the meeting which means you will have to borrow or buy a replacement to compete, so it pays to look after them and also store them in a padded bag or box when not in use.

At your first meeting the Chief scrutineer will, if it is satisfactory for use, fix an MSA Motor sport approval sticker on the side of the helmet this will cost £1. ***Check out Sections Q.10 of "The Blue Book" for full details.***

### **4 – PROTECTIVE CLOTHING**

A set of flame resistant sprint overalls, conforming to the following test specifications

B.S. 6249 part 1 index A or B,      ***(but NOT index C)***,

PR EN533

PR EN533: 1995 Index 3

or FIA stitch marked on the collar in the format 01.256.RAC.99, 05.26.CSAI.98 and 01.034.FFSA.87 as 3 typical examples of the 300 or so approved patterns.

***Do not buy overalls marked 01.004.RAC.86, 01.030.FFSA.87, or 01.038.RAC.87 as these were found to fail the flame test and were subsequently rejected by the FIA / MSA.***

Standards will be clearly marked on the overalls. Although not yet a mandatory requirement, it is recommended that flame resistant gloves, boots, socks, balaclavas and underwear are purchased. ***Check out Section Q.9. of "The Blue Book" for full details.***

### **5 – TIMING BEAM CUTTER**

A vertical timing strut painted matt black 254mm x 51mm with integral mounting bracketry and constructed from solid material such as metal, stiff plastic or wood will need to be mounted to the front of your car in order to "break" the beam of the timing equipment. This can be firmly fixed on using cable ties in the case of a road-going car, which is only occasionally used for speed events, or bolted to the front of your car for more substantial fitment. ***Blue Book reference L 10.9.1 for details.***

### **6- IGNITION / BATTERY CUT OFF SWITCH.**

The ignition switch must have the ON and OFF positions clearly marked on the panel adjacent to the switch.

In the case of NON road-going cars an external Master Battery cut-off switch must be fitted which must also be clearly marked with the ON and OFF positions. This switch must be of the correct type (FIA) which does more than just break the main battery lead. It must also disconnect the ignition circuit and place a load bypass resistor in the alternator circuit otherwise the engine will continue to run off the alternator when the Battery cut off is operated, it is tested by the scrutineer with the engine running. ***Blue book reference L10.6 and Q8 for details.***

### **7- FIRE EXTINGUISHERS.**

These are not mandatory, however, should you wish to have one in your car it must be of the AFFF type Not BCF Halon. **Blue book L 10.1.4 refers.**

### **8- HEAD RESTRAINTS.**

**MANDATORY FROM 1<sup>ST</sup> JANUARY 2004.** Road-going taxed cars the head restraints fitted to top of high backed seats are acceptable.

However for any cars, road and non road-going, fitted with seats without head restraints then pads will need to be fixed to brackets off the roll over bar. **Blue book L10.1.3 and Q13 refer.**

### **9- OIL CATCH TANKS**

An oil catch tank of 1 litre minimum ( plastic drinks bottles are no good for holding red hot blown out oil ! ) must be fitted to any engine breather unless as in the case of a unmodified road-going car there is a closed engine breathing system.

**Blue book L10.3.5 refers.**

### **10- SEAT BELTS**

Road-going normal 3 point diagonal shoulder and lap strap mounted at 3 points on the chassis is acceptable.

Modified class cars must be fitted with 4 point, two shoulder straps and one lap strap fitted to 4 anchorage points.

**Blue Book L10.1.2 and Q2.1 refer.**

### **11 - SILENCING**

All cars must be fitted with effective silencing system and will be tested at commencement of competition, Competition venues have been lost or are under threat because of previously high levels of noise.

Road-going cars with normal silencing systems are usually acceptable, but systems with single small bullet silencers or large bore straight through ones might be a problem, if you think yours sounds very noisy, it might not pass the noise test. In which case take a spare quieter silencer and be prepared to fit it if necessary, a restrictor can also be fitted but these may affect the power output. The test is fairly strict and it is not unknown for competitors to be stopped from competing.

**Blue Book E12.17 table section G refers, with a noise level of 108decibels at 0.5mtrs from the exhaust tail pipe measured at 2/3rds your maximum r.p.m.**

### **12 - CARBURETTOR/ FUEL INJECTION THROTTLE SPRINGS**

Additional throttle closing spring(s) must be fitted to those provided by the manufacturer to prevent the throttle remaining open in the event of failure of any part of the linkage from pedal to throttle. Fuel injection throttle bodies fitted as standard with two concentric springs around the end of the airflow butterfly shaft, and fully electronic “fly by wire” throttle bodies are acceptable without additional external springs. **Blue Book E12.4.2 refers**

### **13 - ENTRIES**

A registration and entry form to the W.S.C.C. Speed Series can be downloaded from the club web site or send a stamped addressed envelope (C5 size) to W.S.C.C. – Mr. S C. Robinson, Cherry Trees, 25 Dene Bank, Lady Lane, Bingley, West Yorkshire. BD16 4AR, or by e-mail at pr@wsccl.co.uk.

## **DON'T FORGET - YOU WILL ALSO NEED A CAR.**

**(Westfield or similar)**

**FAQ (Frequently Asked Questions)** - *Is my "standard" Westfield manufactured single piece roll bar o.k. ? or do I need a fully braced roll bar ?*

**Answer** - The single piece roll bar is generally accepted FOR ROAD-GOING CLASSES by the MSA scrutineers for sprints and hillclimbs and used by a few competitors. It is perhaps advisable to consider the fitment of a more substantial roll bar under any circumstance, not just for track use.

If you do decide to fit a braced type roll bar, please ensure that it fully complies with current regulations – Your attention is drawn to the height of roll bar above your head whilst wearing your crash helmet should be 50mm minimum. **Blue book L10.1.1 and Q1.5 refer.**

**F.A.Q.** - *Will my road-going Westfield be o.k for track use. ?*

**Answer - YES.** The W.S.C.C. Speed Series is aimed at both the absolute novice beginner and experienced competition drivers (and all categories in between). With a few minimal safety requirements as previously listed, your car will be ready for track use, i.e.

A timing strut, an oil catch tank of a minimum of 1 litre capacity and a sticker adjacent to the ignition switch showing "off". Windscreens or aeroscreens must be fitted to all road-going class cars to suit your particular class entered.

Also required are some stick on competition numbers, which are not normally available on the day so must be purchased or home-made before the event. If home-made Bold Black numbers on a light coloured background say on A4 size paper will be acceptable or white numbers on a contrasting dark background **Blue book E11.3.11** refers,

oh and don't forget they might need waterproofing if you don't want them to wash off in the rain and masking or tank / duct tape to fix them in place. And finally don't forget you will need to produce your Tax disc and current M.O.T. and insurance certificates for road going classes. An MSA car logbook is required for modified non-roadgoing class cars which can be obtained from an approved MSA licensed scrutineer.

Check Your car is mechanically sound and serviced, paying particular attention to engine oil, brake pads, steering and tyres and read through the appropriate sections of the MSA Blue Book, use and apply some common sense and it really is that simple.

### **How do I enter an event ?**

When registered as a W.S.C.C. Speed Series driver your details will be issued to all event organising clubs – Most clubs will use this data for issuing event entries. – **BUT NOT ALL.** – A number of event organising clubs only send out entry forms to previous participants or those that make contact directly.

To ensure you get the details you require it is strongly advised that you contact the organisers directly and request entry regs – all relevant contact details are contained within the books received with your competition licence.

### **So you have now received a set of event regulations and entry form – what next ?.**

Simply fill in the form providing **ALL** details noted. Do not omit ANY requested information or your entry may be refused. Events fill up very quickly, it is imperative that you complete and return your entry form with the appropriate fee as soon as possible, any delay may result in your non-attendance at your preferred venue.

## **YOUR FIRST EVENT.**

### **Before leaving home.**

Check you have all relevant event paperwork plus Licence, MOT, Helmet, Overalls, Food and Drink – **not alcohol**. Any driver drinking alcohol at an event will not be permitted to compete. Zero tolerance !! Sufficient petrol to get you there and a can with some spare fuel – don't want to compete with a tank full weighing 10lbs per gallon, tyre pump and pressure gauge, tank or masking tape and a few useful tools. A plastic sheet to put on the ground, which will also cover and protect all your spare kit and equipment from the inevitable rain, will be useful.

### **ARRIVAL AT VENUE.**

Arrive at time advised and park in your allocated bay, if using a trailer observe trailer parking requirements that are generally included in event F.I's

### **SIGNING ON**

If not obvious check with fellow competitors, where signing on is situated, and go there straight-away, there is often a small queue, have your MSA Licence and any other relevant paperwork with you. You will have to sign on and possibly get a documentation / scrutineering process sheet, but not always, it varies between events. Then go back to your car and get it ready for the scrutineer, this means in competition trim, **not full of personal kit etc.**

### **SCRUTINEERING**

All cars must undergo scrutineering at each event prior to competition. Many items will be checked in order to ensure the safety of all cars.

Your first event and the scrutineer approaches, with some apprehension just like taking your car for a M.O.T., will it pass ?

Well let's re-assure you that the scrutineer will help and encourage you all the way to pass, you are unlikely to fail unless it is a really serious problem and fortunately this is a rare occurrence, but will perhaps leave you with some jobs to do before the next event.

He will check the competition number is correct – some drivers forget to change the numbers from previous event. The scrutineer may ask if it's your first event, if not tell him and ask his advice.

If it is your first he might explain what he's checking as he goes around the car- but not all scrutineers have the time to do this.

He will look at the general appearance of the car as he approaches, so it's a good idea to make sure it is looking it's best, first appearances matter.

He will check Helmet and overalls so have these out of their bags and ready, or better still, wear your overalls.

The cockpit will be next, checking seat belts and mounting points, seat security and fixings- some movement is permitted for slide adjustment seats but none for bolted in ones. Head restraint position – may ask you to sit in to see that your head aligns with the restraint and does not protrude above the roll bar level.

Checks the brake pedal for a little free movement, and that it doesn't feel soft where air has got into the braking system. Checks effectiveness and free movement in handbrake.

Pulls the steering wheel to check security, and rocks steering wheel side to side looking at front wheels to check for free movement, excessive free or stiff movement will be investigated and may have to be rectified.

Checks ignition switch position and marking, may check washers, wipers for operation for road-going classes.

Finally quick look around cockpit for loose objects, wires, etc.

Next the scrutineer will look at the engine compartment, looking for oil and petrol leaks, all pipe-work inspected especially important not to have petrol leaks / seeping from connections between pump and carburettor / injectors, will ask and check location of petrol pump.

Checks carburettor / injection pull off springs. Battery security and protective cover on Battery +ve terminal. Yellow tape **MUST** be wrapped around battery –ve earth lead.

Check fluid level in Brake Master Cylinder reservoir.

Then a general check around engine and radiator to ensure all mountings are secure and well engineered.

Moves to front suspension, checks flexi brake pipes and callipers for damage, deterioration and leaks. The scrutineer will not be happy to find problems with them, checks for excessive wheel bearing play, play in suspension joints, bent or mis-aligned suspension arms, may get you to rock or turn the steering wheel to check movement. Check tyres for sufficient tread depth at least 1.6mm throughout the day **Blue Book R1.1.2**, (may check type and eligibility of tyres later in the day). Whilst at the front- checks Beam Strut.

Looks down passenger side of car and possible check passenger seating area.

Moving to back of car, check rear suspension locations, battery (if not at front), fuel pump, fuel tank security where accessible, and effectiveness of seal in petrol filler cap. Will want to know if and where any tank breather pipes and non-return valves are located.

It is not necessary to carry a spare wheel.

Rear wheel bearings are checked with the handbrake off.

“Tip of the Day” – Buy a Tippex pen and mark all your suspension nuts with a line across the top and onto the wishbones – it makes it so much easier to quickly check that everything is still tight and secure between events.

Hopefully you’ve not been reduced to a bag of nerves, in fact although it seems longer, scrutineering takes roughly only 5-6 minutes, he will pass your car and give you a scrutineering label which you must stick or display on the car for marshals to see, sign the competitors process card if one is required, and you are ready to join the queue for first practice – what a relief !!

He may fail it and ask you to rectify the fault and report back for a further check of the failure item(s) before issue of the Scrutineering label. The work may take some time to rectify and may involve borrowing something or technical assistance from other competitors or the scrutineer, usually everyone is very helpful and it doesn’t matter how long it takes you. The Clerk of Course will usually allow you to practice out of order as long as it’s before the first timed runs commence, as long as you inform the officials of your problem. So don’t get worrying too much.

He may pass it but ask you to rectify or improve something for the next event, which he will expect you to do.

If it is really serious he may fail you altogether, and he will notify the Clerk of the Course, and you may have to go home, but check with the Clerk of Course first.

When being called for practice by paddock marshal or circuit tannoy system, proceed without any delay in a safe manner to the assembly point.

**But please remember you may not Practice or compete without first being passed by the Scrutineer.**

## **NOISE TEST**

The final ordeal!!

This is the noise test, usually done whilst you are in the line waiting to go for one of your practice runs when it is expected that your engine is up to running temperature.

You will be asked your usual maximum R.P.M, and the scrutineer knows roughly what it should be for the type of engine and class you are in. He will tell you the 2/3rds figure and ask you to rev it up to that, but not to exceed it, hold it as steady as you can for about 10 seconds whilst he uses his noise meter to check the level. You will be advised the reading. If it is

considered excessive be prepared to return to your paddock position and carry out recification with a replacement silencer, or temporary restrictor adaptor or length of correct diameter rubber hose clamped over the exhaust pipe outlet, which must remain in place throughout the meeting if you pass ok. You can keep on trying the noise test until it is satisfactory when you will be permitted to compete.

### **DURING EVENT**

Throughout the event scrutineers will be monitoring and checking cars on the track, on the start, and in the paddock for excessive noise, mechanical failures, and sometimes compliance with such things as tyre types that are approved for the event, but more importantly for your safety.

Don't forget Scrutineers are there to ensure you are safe and have a great day.

### **STILL UNSURE AND WOULD LIKE TO DISCUSS FURTHER ?**

Since its inception The W.S.C.C. Speed Series has developed into one of the most enthusiastic, competitive and best of all "FRIENDLY" championships. There are over 100 experienced drivers available who will answer any questions or queries you may have. A full fixture list is contained in the club magazine and website, seek one out, go along and watch, whilst there simply approach a Speed Series competitor and ask them if they could spare you a moment. Advice and comments are freely given. For the 2005 season the championship will have a designated list of "mentors" for all newbies – These are experienced drivers and competitors who are available to offer advice and assistance with any general queries you may have at an event.

There is also the Club's boardroom in the Speed Series section, where much advice and comment is freely given by fellow competitors – go to [www.wsccl.co.uk](http://www.wsccl.co.uk).

### **WANT SOME EXPERIENCE ?**

Many circuits and clubs organise "Introduction to Sprinting" days – such as Shenstone & D.C.C. based at Curborough, near Lichfield. Prices are very minimal and the instruction is undertaken by experienced drivers who are more than willing to encourage anyone.

Similarly, there are other circuits that can offer "Track Days" with video and instruction such as Prescott. Give them a call, full contacts of all circuits and clubs are contained in your club guide and fixture lists issued with your licence.

### **DON'T WANT TO COMPETE, BUT WOULD LIKE TO BECOME INVOLVED ?**

Your club needs you **NOW !** Track Marshals are required at all motor sport events, be close to the action, have a day out, and often there's a lunch provided and IT'S ALL FREE.

If you would like more details on marshalling at a W.S.C.C. event, please contact any committee member, contacts listed in the club magazine "WESTFIELD WORLD".

***This Guide has been prepared by: David Bowlas M.S.A. Scrutineer and W.S.C.C. Speed Series Eligibility Scrutineer and the W.S.C.C. Speed Series organising team.***

Here is a short article and advice from experience as a total newbie produced by Alison Anderson – who's husband Keith entered the Speed Series as a Novice at the beginning of 2004 :-

"Buy the best lid / overalls etc you can afford, particularly lid. You only have one head and one layer of skin (*well technically you have more than 1 layer of skin but let's not dwell on that here*).

Make sure you carefully check the relevant B.S. type numbers, don't rely on shop staff to tell you that it's o.k. (particularly if you go to a motorcycle shop for your lid - most bike lids aren't sufficient as they don't have fire protection, given that in the event of a motorbike crash you do not finish strapped inside your bike)...You don't want to go spending your hard earned cash on stuff only to discover it's not adequate for sprints / hillclimbs.

The numbers can be quite hard to find on some lids, My husbands snell number is well hidden in the

inside lining, but do check yourself that the equipment you are buying is marked with the appropriate numbers.

\*Once you have registered for the speed series, your details will go on a mailing list which gets sent to the organisers of each event. You should then automatically get sent copies of regs / application forms for each event.

A list of the event organisers is contained in the W.S.C.C. regs and the smaller booklets issued with the Blue Book contains the contact details. These tend to be very useful if you are like us and lose things as soon as they arrive through the letterbox (also if you see on the web site boardroom that people are applying for something and you don't recall seeing the form arrive).

Also if you have good internet availability, lots of the events have email contacts and some have downloadable application forms.

If you are on a really tight budget, remember that you can send off a cheque for £80 or so at the start of the year and it might not get banked until the application closing date (usually a few weeks before the event). Easy to forget about and you can suddenly find your bank account lighter than you were expecting all that time later.

Also sometimes a car club runs several events each year, and may send out all the application forms in one booklet (some of which won't be events attended by the W.S.C.C.) so it can be quite easy to overlook one. For example, in 2004, the same club organised Three Sisters in April and October. Because we didn't apply for the April one, we put the stuff aside, not realising that it also contained the October application forms.

\*2004 events generally cost between £65 and £90 a pop, I reckon most were in the £75 to £85 region. Sounds a lot of money for just a few minutes on track, heck, it *is* a lot of money for just a few minutes on track, but I'm sure that everyone who does it, will tell you that it is well worth it !

The whole day, the atmosphere, the social scene, the adrenaline rush of the competition, the pit babes.

\*Don't forget to factor in other costs:

- fuel for travelling to / from events. Some brave souls drive their Westies to / from the circuits, others tend to trailer them so they know they can get home safely if they have an off / break something in another way ! Obviously trailering it adds to the fuel costs.

- overnight accommodation - If you live a long way from your chosen event, check out whether you can camp at or near the circuit. Sometimes it will say so in the regs you receive (always look for the magic words "shower block" ), if you're not sure, ask on the boardroom or an earlier event, someone is bound to know !

Camping / kipping in car is obviously a good way of keeping costs down but may not be terribly popular with your wife / girlfriend / partner / significant other if you have one.

- Insurance - you pay your money and take your choice. Some people pay extra for insurance to cover you whilst racing, many don't. It's up to you! Cost is around £75 / £90 per event

– Sprinting / hillclimbing your car will inevitably strain it more than normal use, so factor in finance for extra maintenance / wear and tear.

\*Encourage your wife / girlfriend / partner / family / significant other, if you have one, to come along and get involved (even if they don't want to drive). Everyone is a friendly bunch and there is always someone to chat to, in addition to wearing a leotard and cheering you on with pom-poms of course.

There is always a vacancy for a speed series commentator which is a great way to amuse oneself for the day. You will find that if they enjoy it, it smoothes the way to pay for more of it. I speak from the experience of being in that situation ! In fact, from thinking that track days were really boring - I wouldn't bother going with my hubby, I have found the Speed Series events to be such fun that I even went to one without him when he was stuck abroad.

Personally I've found that it's been great to get away together (well apart from the one where Hubby wasn't there) and enjoy a really good social weekend. It makes it time for "us" rather than Hubby doing his thing and me dragging along behind.

Thanks – hope to see you all around a paddock sometime in the future – **Alison (Mrs Westy)**