

## TIPS ON SPRINTING AND HILLCLIMBING

### FOR NEW COMPETITORS

By Geoff Ward with contributions from Craig Powers

### FORMALITIES

1. Membership of a recognised motor club allows you to enter any event the Club or its championship is invited to. (This will be stated in the event regulations). Entry fees vary from about £100 to £140 a day.
2. If starting in a few months' time visit a sprint or hillclimb. Observe what goes on and talk to competitors, officials and marshals.
3. Get an MSA competition licence. The licence you want is Non-Race National B, which at the time of writing costs £43. You can apply for this online at [www.msauk.org](http://www.msauk.org). Your licence will arrive (allow a few weeks) with a copy of 'The Blue Book' – properly called the MSA Yearbook. Sections of this will be referred to later in this article but you will need to study Section J (Competitors: Vehicles), Section K (Competitor Safety), Section L (Tyres) and Section S (Sprints and Hillclimbs).
4. Just about any four-wheeled vehicle can enter a speed event (as a beginner you can't enter a non-roadgoing car of more than two litres). Even your bog standard commuting car can be used. You can find which class it is eligible for by checking the event regulations and also from Section S of the Blue Book. If in doubt consult the Competition Secretary through the Club website.

### YOUR CAR

Most people start with a road-going car. There are various classes for these, depending on size and modifications, from none to quite extensive. It is important to remember to display the road tax, and bring form V5, insurance note and MoT, if applicable, to the event. Obviously, the car should be well maintained, safe and roadworthy with no oil leaks or flapping bodywork. It will be checked by a Scrutineer for safety. Your car is going to be pushed fairly hard so if you suspect something is dodgy replace it before the event. Tyres (Section L) must be listed in 1A or 1B (depending on class entered).

There is nothing to stop you entering a pure competition car (i.e. not road registered) although it must be under 2000cc (over this size need a Non-Race Nat A licence or a circuit racing licence).

You will also need an MSA Competition Car Log Book (S9.1.7 and J2). Nobody really knows why; they are not required for circuit racing. Consult a Scrutineer before the event.

Specific things to do to your car:

- Fit a timing strut (S10.9). Generally made from aluminium and if a road-going car needs to be removable but securely fitted.
- Wrap yellow tape around the battery earth lead to identify it (J5.14.5).
- Have a means of turning off the ignition /fuel, reachable by driver whilst seated (S10.5.3). On a road car this can be the standard ignition key. For the benefit of the marshals this must be identified with an On/Off sign at the switch, S10.6.1. For standard road cars a note in the side window pointing to the ignition switch, with a direction arrow for OFF, will usually suffice.
- Have a means of towing the vehicle in emergency (S10.5.1). Have your tow hook / tow eye available. (Some Clubs state in their regulations that a temporary sticker at the tow point "Tow"

should be displayed; if so get some white PVC tape and a black magic marker pen for such improvisations.) If you have a removable screw-in tow eye most Scrutineers will be happy with you just having one of them and moving it between front and rear in the event of an emergency. What we want to avoid is down-time whilst competitors work out where the tow eye is after an accident. i.e. be prepared.

- Have a positive means of throttle closure (J5.4.2 - Be equipped with a positive method of throttle closing by means of external spring/springs so that in the event of failure of any part of the throttle linkage the throttle(s) are sprung closed). The common interpretation is that there should be a visible spring at the throttle body so that if the cable breaks then the throttle butterfly will shut. You should not be reliant on a single spring at the pedal.

- Race numbers on each side of the car (S9.2.5 and J4). Do not have these displayed when driving to and from the event or you will be in big trouble with the MSA.

#### YOUR PERSONAL EQUIPMENT

You'll need flameproof overalls and gloves and a crash helmet. See Sections S and K of the Blue Book for the required specifications. These are quite expensive and if you're on a budget (most of us are!) shop around and check EBay. But they MUST meet the specifications in the Blue Book. Racing shoes are a good idea – plastic shoes and nylon socks are not!

#### ON THE DAY

About a week before your first event you will receive your 'Final Instructions'. These will include a timetable, an entry list which will identify your competition number, other information and possibly instructions on where to park in the paddock.

The day starts quite early – possibly meaning arriving around 7am. If paddock places are not allocated try to park with cars in your class (i.e. with numbers close to yours). Before the runs start you have to:

1. Sign on. Take your competition licence and club membership card to the 'signing on' centre. If it's not obvious ask. This is a simple formality to check your documents and confirm you've arrived.
2. Prepare your car for scrutineering. This may take place in a special area or at your paddock place (details will be in the Final Instructions). If you've driven to the event arrive with the fuel gauge nudging empty and bring spare fuel in a can. Take out anything that could move, spare tyre and your tools, and take off any wheel trims. The scrutineers will want to see under the bonnet and any other parts of the car that take their fancy. Just do what they say, most are friendly and the main purpose is to check that your car is safe.

The Scrutineer will also check your overalls, helmet and gloves. If it's your first event you will have to ask for an MSA sticker for your helmet, (there's a small charge for this but it only has to be done once). They will also want to check road tax, V5, MoT and insurance on road cars, or log book for non-road cars.

3. Before, or after, Scutineering walk the course from the start line. Try to envisage where you will change gear, brake, turn into corners and the line from the apex. Particularly watch for 'linked corners', where the exit from one is compromised by the entrance to the next. Identify the finish line (there should be a chequered board) and the route back to the paddock

4. Shortly before the runs start you, and all the other competitors, will be called to a Drivers' Briefing. This will give more information on the way the day will be run and the flag signals used.

The competition starts, (generally sometime between 9am and 10am), with two practice runs. You will know the running order from Final Instructions and Drivers' Briefing but keep a very close eye on what's going on and be strapped in to your car, with the engine warmed up, in plenty of time before a marshal or tannoy announcement calls your batch of cars up. You will be directed (or follow other cars) to an assembly area (basically a queue) before the start line, roughly in number order.

Whilst queuing you can watch the start system. When the marshals call you forward place your car as near as you can to the start line and take your foot off the brakes whilst they push and pull it into place. They are in charge; follow their instructions. Close to you, at the side of the start area, you will see the start light (a sort of box on a stick). It will be showing a red light. Do not move when this is on. Fairly quickly this will turn to a green light. As soon as you can get going, (the timing starts when your timing strut cuts the beam, not when the light comes on). It is rare, but possible, that the green light will turn back to red (for instance, if the car in front of you has had an incident), so keep the light in peripheral vision.

At the Drivers' Briefing competitors will probably have been told to 'treat practice as practice'. Experienced drivers will cheerfully ignore this sensible request. You should stick to practising - aim to go as quickly as you can whilst feeling fully in control. You are trying to get a feeling for gear-changing, braking, turning in and your lines, especially on 'blind' corners where you cannot see the exit until you are there. Lift off after the finish line – but don't switch off; the entry to the paddock often comes up very quickly. If you see a marshal waving, or holding out, a red flag stop immediately – there is an incident in front of you. Proceed slowly when the marshals indicate it's ok. You can then go back to the start line for a re-run.

At this stage you should be staying on the tarmac. If you spin or take to the grass get back on the track with care (there's another car only 30, or so, seconds behind!). Try not to drag mud and stones back on to the tarmac, especially on the racing line. Watch for red flags and check the track behind. When it's safe, or indicated by the marshals, drive back to the paddock at reasonable speed and check for damage. And, no, you won't get a re-run for your own mistake!

Between runs, review what you have learned about the track and check your car. Keep observing what's going on with other cars in the paddock – your next run often comes up surprisingly quickly. Check your times – they will be displayed in the paddock and sometimes there is an electronic display after the finish line. See what times others in your class are doing but your main aim is to improve your own times as you get familiar with the track and hone your driving skills.

Most of all – HAVE FUN! That's what it's all about.

SEE THE VIDEO! If you visit to the Longton Motor Club's website and go to, "Getting Started" there is a very useful video by Russell Thorpe (Renault 5GT Turbo) which explains the basic preparations.

Many thanks to Longton and District Motor Club for allowing us to use this article and to Geoff Ward and Craig Powers for putting in the time and effort writing it.