



### Scrutineers Training Seminars

The final three training seminars of the current season will be held as follows:

Guernsey Monday 20 April 2015 - Peninsula Hotel, Les Dicqs, Vale, Guernsey, GY6 8JP

Jersey Tuesday 21 April 2015 - The Monterey Hotel, St. Saviour's Road, St. Helier JE2 7LA

Isle of Man Wednesday 29<sup>th</sup> April 2015 - The Hoggery, Nobles Park, Douglas, Isle of Man, IM2 4BD

At all venues signing on will be from 18.30pm for a 19.15pm start and a sandwich buffet and refreshments will be available. Specific invitations have been sent out so if you have not yet responded then please do so to [technical@msauk.org](mailto:technical@msauk.org).

### Historic Eligibility Training Days

Training days have been arranged as follows;

Saturday 30 May 2015, Ross on Wye MC, 25 Kyrie Street, Ross on Wye, HR9 7DB

Sunday 31 May 2015, Holiday Inn Hotel, Brighouse, Leeds, HD6 4HW

The sessions are primarily intended for those involved in eligibility of Historic Special Stage Rally cars, but much of it is principle, so there is possibly value to those involved in other branches of historic motorsport. Part of the day will be devoted to MSA Historic Stage Rally car regulations and the other part concentrated on FIA Appendix K. Those that have already expressed an interest in attending such a session have received an invitation, but if you have not received an invitation and would like to attend then please contact [technical@msauk.org](mailto:technical@msauk.org).

### Scrutineer training & development

We are all familiar with the annual Scrutineer training seminars, the training modules for Scrutineers etc. The MSA is currently reviewing the way we train Scrutineers and incorporated in that will be reviews of these systems. If you would like to be involved in this process then please drop a note to [technical@msauk.org](mailto:technical@msauk.org) so that we can consider if such involvement will be appropriate. We are aware that there are some Scrutineers who have roles in educational establishments, in delivering training for their employers and so on. For the annual training seminars we need people who are not only knowledgeable about motorsport and Scrutineering, but also have presentation skills. The present modular system was designed over ten years ago, so there is no doubt that it needs review and, again, there are Scrutineers who are involved in designing training programmes so this is the sort of experience and skill that we really want to tap into.

### How do you Scrutineer cars?

The principle of Scrutineering is that you are checking a car against a standard, and that standard includes MSA regulations, championship regulations, event regulations and – for international events – FIA regulations. With only six minutes per car available, it is impossible to check every detail. Therefore, it has always been promoted that Scrutineers always check a certain number of things, general condition is a good start and always helmets, overalls, harnesses, ROPS, steering, brakes etc. It is then generally going to be a case of “any six from sixty”. The “six” needs to always change – for example there is no point in always checking the width of rear aerofoils. Better you check this on some cars and something different on other cars. The variation can be made within a meeting, or meeting-by-meeting. Having this element of change makes Scrutineering more effective.

### Fake BSI labels

We have become aware of fake BSI labels being offered for sale, seemingly printed with any serial number required. BSI have been made aware of this situation. Usually the colour of fake labels is not quite correct, the font size and/or style are wrong, the size of the label may not be correct. The finish of the label material may not feel correct, label corners are not correct etc. What else to look for? Perhaps a slightly scruffy helmet that has clearly seen a bit of life, yet carries an immaculate new-looking sticker? Remember there is also a printed label inside the helmet. In the past other labels have been identified as being fake, the principles of identifying them are just the same as indicated above.



### ROPS issues

It is probably true to say that nothing surprises us in the MSA Technical Department, which is useful! The three images shown here were taken of a car presented for Scrutineering at a Rallycross event. The Competition Car Log Book for the car specified that the vehicle was a Stage Rally car. Regulations for Rallycross require twin door bars on all cars (see (N)6.12.1.). It appears the competitor had read the regulations, which is the good bit, but the execution of how they chose to attempt to meet the regulation is totally unacceptable. (K)1.3.5(b) specifies that *“the side protection must be as high as possible but not higher than one half of the total height of the door aperture measured from its base.”* It is difficult to be sure from these images, but it appears that this regulation may be infringed. What is very clear is that what appears to be part of an exhaust clamp is simply not an acceptable connection to the A-post. Drilling a reasonable size hole in the front hoop may not be covered by regulations, but on grounds of general safety is not considered acceptable unless a suitable ferrule is welded into the tube. The connection to the B-post is not easy to understand unless it is studied carefully. It appears that a tube with a piece of folded sheet metal has been inserted in the end of the added upper doorbar, whether it is welded to the doorbar is not clear. A U-bolt going round the original door bar is then used to pass through the folded section of the sheet metal, so as to clamp the added doorbar on top of the original doorbar. What tube was used is unknown, but really is of little consequence for the entire arrangement is clearly outside of the regulations and totally unacceptable.



### FIA seat homologation labels

A query arose recently in respect of the label shown in this image. The *Cobra Monaco Pro* is a fully trimmed steel-framed seat and at the time that this example was manufactured – August 2011 – the requirements imposed by the FIA in respect of labelling were less demanding than they are now. At the time they allowed such a system where the label was applied by heat transfer to the cloth cover. There is a secondary check in that underneath the seat on the steel frame there is a quality control sticker which is also dated. There may be a difference in the dates, in that the steel frames are manufactured as a batch and then trimmed as required. So there is the possibility that the quality control sticker date may be slightly earlier, but it is unlikely to differ by more than 3 months. If you have doubts about any seat it is always worth looking under the base of the seat if you can, for most manufacturers place a label in this area as part of their quality or batch control systems.





### Frontal Head Restraint tethers

Simpson have recently FIA-homologated a new design of FHR tether, where the tether termination is a simple holed metal strip that is pushed into a slot in the helmet post, to be retained by a spring loaded pin. To release the tether the yellow strap attached to the end of the sprung pin is pulled downward and the tether termination is then released to drop away.

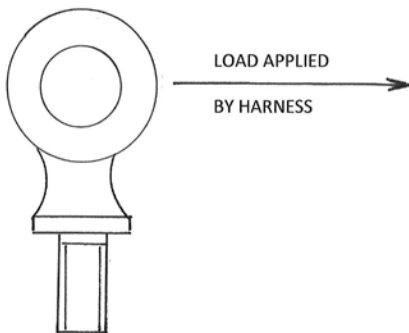
Take care in how people use different items of FHR equipment, it needs to be ensured that FIA Appendix L, Chapter III, Article 3.3 "Compatibility and permitted use of items approved to the FIA 8858-2002, 8858-2010, 8860-2004 and 8860-2010 standards" is respected. This can be viewed via the FIA's new website by clicking [here](#).



### Harness termination

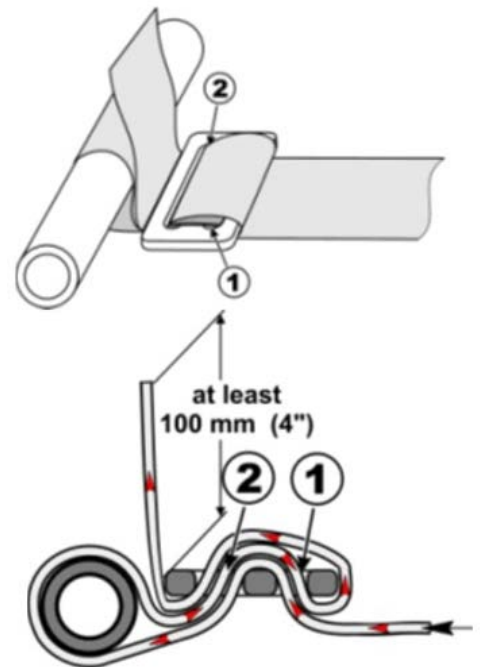
There are a number of alternative ways of attaching harness straps to the structure of the car. One method is to wrap the harness webbing around a harness bar incorporated into the ROPS (requirements as per (K)1.3.9.) and secure it by use of a three bar adjuster. For the arrangement to be secure, the loose end of the webbing has to be passed back under the adjuster bar nearest the tube, as demonstrated in the two diagrams to the right, kindly supplied to us by Simpson. These three bar adjusters are also used where termination of the webbing is made using a plate bolted to the car structure, or hooked onto an eye bolt. The same advice applies in that to fully lock the adjuster the webbing needs to be fed back under the first bar as shown.

Note the advice of FIA and MSA regulations, and that of the harness manufacturers that any mounting bolt (including eye bolts) should preferably work in shearing stress and not in traction



Eye bolts should be orientated to be loaded as shown to the left.

Remember too, that where bolts and eyebolts are not using manufacturers built in captive fixings, suitable spreader plates are needed and if the fastenings pass through such as space frame chassis tubes then suitable bushes need to be welded or brazed into the tubes. If you need an example find a recently manufactured Caterham, for most have two pairs of bushes in the cross tube so as to cater for the use of a Frontal Head Restraint device.



### Brake lights in Circuit Racing – (Q)19.11.3

As previously advised, there are a number of standard production cars that do not comply with this regulation as published in the 2015 MSA Yearbook. Please be aware that the MSC Executive Committee has approved for immediate implementation a change to the regulation as indicated below. Please note the reference to "a pair of brake lights" and the requirement for a separation of 300mm between the lights is taken from Construction & Use Regulations, so any production car should comply. Note there is one regulation to cover all cars where there is a requirement for brake lights to be fitted. Publicity has been given to Race organising clubs and will be posted on the MSA website.

**(Q)19.11.3.** With the exception of Racing Cars, Clubmans Cars, 750 Formula, Legends Cars and Period A to E all vehicles must be equipped with a pair of brake lights **equally disposed about the vehicle centreline, on the same horizontal plane** with ~~each light being within a minimum of 300mm of the side of the vehicle and~~ **between them** and which are directly operated by the braking system without any time delay.

**Fire extinguisher & external circuit breaker identification**

Requirements for identification are set out for extinguishers in (K)3.2.2. and in (K)8.5. for the circuit breaker. Within (K)3.2.2. it is specified that the two points must be close to each other and in (K)8.2. it sets out that for saloons the trigger point be located at the base of the windscreen, preferably driver's side, or below the rear window. (K)8.3. gives the alternative requirement for open cars that the circuit breaker point is to be on the main hoop of the ROPS. Note also the alternative in (K)8.4. for cars of periods A-E. If the trigger points are to be mounted below the rear window, this means that they need to be just below the rear window, i.e. in an equivalent position to being mounted on the scuttle panel just below the windscreen. Mounting the trigger points on the back panel of a three box saloon or below the tailgate on a hatchback is not acceptable. Please make sure that the identification is placed so that it is clear which trigger point it relates to. Remember that both can be combined into one unit, in which case it is expected that the sole trigger point is located between the two ID signs. There is no requirement for signs that indicate the means of operation and generally it is self-evident if it is a pull-handle or a push-button. If it is not self-evident, then advise the competitor to label the point appropriately.

**Kart long circuit bodywork – bubble-shields**

We were recently sent these photos of a newer-style bubble-shield for use in long-circuit bodywork trim. Reference to regulation (U)17.22.3. throws up some concerns as the requirement therein is that *“the bubble shield shall end symmetrically 150mm minimum from the pedals in the normal resting position...”*. This is also demonstrated visually by reference to Drawing 7 - Diagram 6 of Appendix 1 in section (U) (page 383). From the images it is clear that rather than ending a minimum of 150mm from the pedals, this bubble-shield does in fact extend beyond the pedals and is therefore in contravention of the regulations.

