

Communication

It is a fact of life that people move house, change mobile phone number, change email address etc. Please make sure that you keep the MSA informed, and bear in mind that the MSA Licensing database does not necessarily update other databases. In particular if you change your email address, as well advising the Licensing Department, please drop a note to technical@msauk.org so we can amend your details on the separate *Scrutineers' Bulletin* circulation list.

Training seminars

The training seminars are now well underway, and to date have been well received. Please be advised that on attendance you will be provided with an expense form to enable you to claim for your travel costs and also a contribution towards your lunch costs of £7.50.

At present the following sessions still have spaces available, so if you want to attend one of them please drop a note to technical@msauk.org:

Saturday 07 February – **Bristol** (KART only)
 Sunday 08 February – **Kent** (CAR or KART)

Saturday 14 February – **Newcastle** (CAR only)
 Sunday 15 February – **Newmarket** (CAR only)

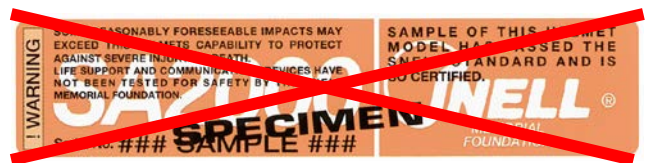
Scrutineers of the future

There has often been plenty said about the need for Scrutineers to be recruited and trained. It is regularly mentioned that Scrutineers are an aging population and this is largely true, although we do have some younger folk that help to pull the average age down a little!

A number of the more recently qualified Scrutineers have mentioned that they are finding it difficult to get events, noting that they went through the training and qualification process for the very purpose of being able to Scrutineer at events. Please do your best to welcome trainees and newly qualified Scrutineers to your events so that they can gain invaluable experience and retain their enthusiasm. This can only help to ensure that there is an adequate number of Scrutineers in the future. It is clearly not encouraging to continually hear, "I already have my team".

Helmet Standards

Please note that the wording on page 170 of the 2015 *MSA Yearbook* under (K)10.3.1 is correct, but there is an error on page 177, which continues to show the *Snell SA2000* among the images of recognised helmet standards. The *Snell SA2000* standard was removed from the beginning of this year, and last year's *MSA Yearbook* did carry a notice that this would be the case.



Please also remember that some helmets carry an FIA label relating to the fitment of the Frontal Head Restraint posts; this is additional to the normal standards label, not a replacement. Therefore, you still need to identify the normal standards label located within the helmet to ensure its compliance.

Non pump fuel

Do not assume that it is only drag racing and historic cars that may be using Methanol. There are some modern cars in Speed events that use Methanol. (J)5.13.6 requires any vehicle not using pump fuel to display a 3" orange 'Day-Glo' disc next to the competition numbers on both sides of the vehicle. This warns anyone approaching the car that there may be additional hazards to those inherent with pump fuel. For example Methanol burns with a clear flame, so it is not obvious that there is a fire unless you detect a heat haze or feel the heat of the fire.

Please also note the introduction of new regulation (J)5.14.8, which requires any vehicle with an electrical system running at higher than 50V to be identified by the defined sign, as shown to the right, placed next to all competition numbers.





Competition Car Log Books

Please ensure that you charge the correct fee for a Competition Car Log Book inspection and application. The competitor pays you:

£39

As always the split is 50/50, so you retain **£19.50** and forward the application to the MSA with the remaining **£19.50**. Every year we continue to have Scrutineers forwarding the incorrect sums well into the New Year!

Historic motorsport Scrutineer training days

There has been previous publicity regarding our plans to arrange two full-day training seminars specifically covering historic motor sport scrutineering, focussing mainly on rallying and encompassing both FIA Appendix K and MSA national regulations. We have received a sufficient level of interest for us to anticipate that one seminar will be located in the general area of the Severn, and one somewhere convenient to the M62 around the general area of Halifax. If you are interested in attending either of these sessions and have yet to advise us then please drop a note as soon as possible to technical@msauk.org.

If there is enough support we are considering adding a third day at Motor Sports House – or somewhere convenient around the M25 – so if that is of interest then please also advise us accordingly. We need to know quickly, as the dates for these sessions will be in March or April.

Historic motorsport

The basic philosophy of historic motor sport is that the vehicles remain in the specification that they were in period, and that the vehicle complies with the technical regulations of that period. For homologated vehicles this means compliance with the relevant homologation form, but it is possible that the technical regulations of the period did not cover certain items, for example exhaust systems may have been free. In cases such as this, those components still must be of a design and specification as was used in period on that make and model of car.

Shock absorbers (dampers) have a huge influence on the performance of a car. There has been a lot of chatter about certain brands of shock absorber being acceptable or otherwise. A number of companies that manufactured components in period no longer exist. The key to whether a particular component – be that a shock absorber or anything else – is acceptable within the regulations is whether the component is of period specification. With shock absorbers we have no knowledge of any user-adjustable monotube dampers in use until after 1981. Therefore a monotube damper, maximum body diameter less than 42mm (as exemplified in period by *Bilstein*) with no user-adjustment and no remote reservoir would be considered as being period specification and within the regulations for pre-1981 cars. Units of later specification, user-adjustable, fitted with remote reservoirs, etc. would not be. For clarity, if a shock absorber could be adjusted without depressurising it would be considered to be user-adjustable. Be wary of referring to shock absorbers by the manufacturer's name, for providing that the units are of period specification, the fact that they may be manufactured by a company associated to modern specification is of no consequence. It is the specification that is the critical factor, not the identity of the manufacturer. In particular, although advised that *Reiger* do not manufacture "period historic dampers" we have now been further advised that this advice is – or may be – incorrect. As we have made clear, it is the specification that is key!

Section (L) – permitted tyres

You may have already noticed that by way of clarification there is now a line in the opening part of all of the tyre lists (1A, 1B, 2, 3, 4 and 5), stating that *"it is prohibited to re-groove tyres in this list"*. For clarity the term 're-grooving' covers any modification to the tread pattern, be that by deepening existing grooves, widening existing grooves or cutting additional grooves or "sipes" – these being no more than a very narrow groove.



Stage Rally car engines

There appears to be confusion among a number of people – be they competitors or officials – regarding the engine limits within Stage Rallying. The relevant regulation is (R)48.2.1, which sets out the options for production car engines. This can be summarised as follows:

- Maximum of 6 cylinders and 2000cc, GASOLINE fuel, forced induction subject to being fitted with a 34mm restrictor
Or
- Maximum of 6 cylinders and 2500cc, GASOLINE fuel, forced induction subject to being fitted with a 32mm restrictor
Or
- Maximum of six cylinders and 2500cc, DIESEL fuel, forced induction subject to being fitted with a 37mm restrictor
Or
- Maximum of 6 cylinders and 3000cc, GASOLINE fuel, naturally aspirated and more than 2 valves per cylinder
Or
- Maximum of 6 cylinders and 3500cc, GASOLINE fuel, naturally aspirated and maximum of 2 valves per cylinder

(R)48.2.6 states: “*With the exception of cars accepted under 46.3, a car may be fitted with a different engine, not exceeding 25% increase of the capacity of the model, when it was supplied as original equipment by its manufacturer.*” If you take a 2000cc car and fit a larger capacity engine then the replacement engine must be no more than 2500cc capacity (2000 x 1.25). However, if you keep the original engine but convert to forced induction, then that is acceptable subject to having the relevant restrictor, despite the effective capacity increase. Using the same 2000cc engine as an example, converting to forced induction gives more than a 25% effective capacity increase (1.7 x 2000cc = 3400cc), however the required 34mm restrictor pulls the performance down to what is considered to be that of a 3000cc naturally aspirated engine equipped with more than 2 valves per cylinder.

There is also the option of using a “*Specialist Competition Engine*” as set out in (R)48.2.3, or a production rotary engine as set out in (R)48.2.4.

Be sure that with forced induction engines all of the air being drawn into the engine is passing through the restrictor. When sealing the restrictor to the turbo charger, be sure that you seal it in such a way that not only is it impossible to remove the restrictor from the face to which it is attached but also it is impossible to dismantle the turbocharger to remove the restrictor so as to facilitate alterations. Also be careful when checking restrictors that you check for the appropriate diameter for that engine capacity. Not necessarily as a matter of routine, but it can be worthwhile to check restrictor dimensions occasionally irrespective of there being a seal in place.

Brake balance adjusters

For Speed events (S)10.7.2 applies across the board to all categories and states, “*Brake balance adjusters must not be available for adjustment during running.*” On chatting to a regular competitor recently, it was revealed that for many years the same car had been run with what is clearly a dash mounted brake balance adjuster within easy reach of the driver. How many different Scrutineers have looked at that car over the years?!

MSA regulations for Historic Road Rallying (see (R)19.7.6) and Historic Special Stage Rallying (see (R)49.10.4) both prohibit the use of brake balance adjusters that can be operated by either driver or co-driver.

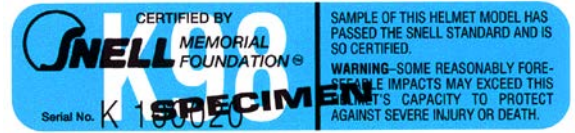
Brake Lights

You may have noticed that (Q)19.11.3 has been clarified to require vehicles to be equipped with a pair of brake lights equally disposed, with each light being within 300mm of the side of the vehicle. It has been suggested that there may be certain standard production vehicles that do not meet this requirement, something which is being investigated. Please use common sense and if it is clearly an unmodified standard production car, and the pair of brake lights are not within 300mm then allow the vehicle to run but advise us at technical@msauk.org so that we can look at any potential issues.



Snell K98 helmet standard

Some of you may have already noticed but the *Snell K98* helmet standard has been withdrawn from the CIK regulations for this year. This means that it can no longer be used for CIK International kart events. However, it remains on the list of approved standards for MSA use, so it is still permitted for national events. There is currently no intended cut-off date for this standard in MSA karting, and as and when one is decided it will be notified through the usual channels, with notice given in the *MSA Yearbook*.



Please note also that *MSA Yearbook* regulation (K)10.3.1(b) is slightly inaccurate, in that it is described as a list of standards acceptable for "International and MSA National Kart Racing Events". The Snell K98 standard is still included in this list, but for clarity it is not acceptable for International events, all of the other standards do remain so.

IAME X30 base gasket

Please be aware that there has been a production change to the 0.1 base gasket used on the IAME X30 engine. This is not a component featured on the engine fiche, but it is something to be aware of as the new style gasket is visually very different, now being clear plastic as shown here, whereas the previous style was a paper-type gasket. The part number remains unchanged. There are three base gasket sizes available – although only the 0.1 has changed – and the class regulations for juniors and seniors allow the use of a maximum of two base gaskets, in any combination.



Remember that we also notified you in the November 2014 edition of two fiche changes on the X30 engine effective for this year, concerning a newly introduced solid clutch drum and a machined carburettor butterfly. Both changes can be found on the full fiche downloadable [here](#).

Rotax FR125 exhaust socket

There is only one change to the Rotax FR125 engine fiche, with effect from 2015. This relates to finish on the sealing face of the exhaust socket flange on the cylinder. Previously the face of this flange included a 'sealing ring' on its surface, as seen in the picture on the left below. On new cylinders the face is now machined flat without this ring, as can be seen in the picture to the right (junior cylinder pictured). The surface finish of the new-type flange face may be either machined finish (as shown), or ground finish.



Either variation – old-type or new-type – may be used with immediate effect. The relevant amendment is included on the current Rotax FR125 engine fiche, which can be downloaded from [here](#).

Cadet axle circlips

Please note that the 2015 *MSA Kart Race Yearbook* regulation B1.5.1 now includes the requirement for Cadet rear axles to be fitted with circlips on the ends of the axle. This applies to any axle now used in any of the Cadet classes, irrespective of what hubs are in use.



Under-16 minimum driver weights

To correlate with introduction of a slightly reduced senior kart class entry age (dependent on licence grades – see (U)15.2.1) there is a new-for-2015 requirement for any driver under the age of 16 in a senior kart class to meet a prescribed minimum weight (see (U)15.3.2). This minimum weight is detailed in individual class regulations, and automatically overrides any other minimum weight that may be in place in that class. For 2015 the following minimum weights for under-16s have been implemented, and can all be found detailed within the relevant class regulations:

Rotax Max – **52kg**

IAME X30 – **54kg**

Formula Blue – **46kg**

TKM Extreme – **46kg**

Honda Senior – **59kg**

TKM 4/s – **54kg**

Kart weighing

An error has been noticed in the 2015 *MSA Yearbook* regarding the weighing of karts. (U)17.29 is shown in red text, when in fact it should not have been changed from the 2014 text. The red text in (U)17.29 should instead have been included under (U)17.29.7 – where the only change would then be the addition of the words “Subject to 15,” at the beginning. For clarity, the correct text for these two regulations this year is as it was 2014 (and shown below), with just the small addition as highlighted below:

(U)17.29. *The minimum weight limit is the combined weight of Driver, kart and engine with the kart in complete racing trim, as at the end of each race or heat.*

(U)17.29.7. *Subject to 15. clubs may run classes to heavier weight limits (if MSA approval is given by the issue of a Kart Technical Exception (KTE)), but may not reduce the weight limits.*

Bambino clutches and wheel widths

2015 *MSA Kart Race Yearbook* amendment 1 was issued on 21 January 2015 and contains clarifications concerning lubrication of clutches and rear wheel widths on Bambino karts, specifically regulations A1.5 and A1.7.1 as detailed below. The official amendment can be downloaded from [here](#).

A1.5 Transmission. *Direct from the engine to the axle via a single length of chain. Only an 80 tooth rear sprocket may be used, unless a single other size of sprocket is defined in SRs. **The internal running surface of the clutch must remain dry and free of grease, lubricant or any additional substance.***

A1.7.1 Wheels. *Widths measured from outside edges:*

Front: 100mm min. and 115mm max. ~~Rear: 130mm min. and 142mm max.~~

Rear wheel width measured from outside edges: 140mm ± 2mm.

Cadet rear bumper

2015 *MSA Kart Race Yearbook* amendment 2 was issued on 21 January 2015 and concerns Cadet rear bumper fixings, specifically regulation B1.3.7 as detailed below. The official amendment can be downloaded from [here](#).

B1.3.7 Rear Bumper. *Must comply with U17.8.4-17.8.8, and the following:*

...

- *Have the fixings secured at all times. **The contact area of the fixing must not protrude inside the rear chassis rail by more than 100mm.***

Formula Blue and Junior Blue weights

2015 *MSA Kart Race Yearbook* amendment 3 was issued on 21 January 2015 and concerns the various weight and restrictor class breaks for the Junior Blue and Formula Blue classes, specifically regulations C5.6 and D3.7. A large number of the various class breaks have been altered from those published in the *Yearbook*. Full details can be found in the official amendment downloadable from [here](#).

IAME X30 number plates

Please note that with effect from the start of this year the number plate requirements for the IAME X30 classes have changed. They have moved from green plates with white numbers, to yellow plates with black numbers.