



OFFICIALS TO UNDERGO SAFETY TESTING BY CAMS

CAMS Officials, including Scrutineers, may be subjected to testing under the CAMS Illicit Drugs in Sport (Safety Testing) Policy which has already commenced at CAMS-permitted meetings throughout the country. Noting that any CAMS-licensed competitor or official may be subjected to testing at any upcoming meeting, CAMS Technical strongly recommend that all scrutineers take note of the important information below and on the Illicit Drugs in Sport page on the CAMS website (www.cams.com.au).

Following the commencement of safety testing in August, CAMS Technical has received several inquiries from scrutineers regarding the use of legal medications that may cause a 'positive' reading. Essentially, codeine is the drug that is most commonly associated with this. The reason it causes a 'positive' reading is that codeine comes from the 'opiate' drug class and that class of drug is one of those that are detectable by safety testing.

Codeine is a drug that can cause potentially dangerous side effects such as dizziness, drowsiness and nausea – all of which can make participating in motor sport dangerous, even as an official. On 29 August, CAMS Safety & Integrity issued this [general medical information](#) via the CAMS website and social media channels which specifically addressed the issue of codeine use.

What does this mean for officials? Essentially, as the general medical information suggests, an approved medical exemption is the best way that you can protect yourself from being excluded from a meeting if your sample returns a 'positive' reading caused by codeine. For further information about obtaining a medical

exemption please contact the CAMS Motor Sport Safety Coordinator on 03 9593 7777 or email integrity@cams.com.au

Noting that it may not always be possible to obtain a medical exemption prior to participating in a meeting, officials who have a need to use such medications the day before or day of a meeting should:

- keep the receipt of purchase of over the counter medications and bring it with you to the meeting;
- bring the doctor's prescription (for prescribed medications) with you to the meeting;
- bring the medication with you to the meeting.

In the absence of an approved medical exemption, the above steps will assist CAMS in determining the course of action in the event of a 'positive' reading for the opiate drug class. If there is insufficient evidence to show that codeine has caused the 'positive' reading, or, if there is reason to believe that you are impaired by side effects caused by codeine, you could be excluded from the meeting.

Please follow the links below for further information about safety testing or alternatively you can contact the CAMS Motor Sport Safety Coordinator on 03 9593 7777 or email integrity@cams.com.au

- [General information including the policy, procedure, medical exemption request form and brochures.](#)
- [CAMS Safety & Integrity – medical information.](#)
- [Illicit Drugs in Sport – Links and Resources.](#)

2" AND 3" HARNESSSES & FHR DEVICES (DATED BELTS ONLY)

With the implementation of mandatory Frontal Head Restraint systems there has also been some debate as to the compliancy of 3" harness belts with these devices. A 3" harness is still valid with an FHR device provided the harness appears on the [FIA List 24 of Approved Harnesses](#).

While 2" belts are recommended for use with a HANS® FHR device they are not mandatory. However using 2" belts without an FHR device in events where an FHR is not mandatory is not allowed and the harnesses must be replaced with 3" harnesses for competition.

This is an issue that has become more prevalent and scrutineers are urged to assist competitors with this as much as possible. CAMS Technical have received advice from most motor sport equipment sellers in Australia to confirm that approved safety harnesses with 3" shoulder belts are still available for purchase with no time frame to discontinue the sale of these items.

For the full CAMS safety harness regulations please refer to [Schedule I](#) on the CAMS website. If you have any questions please contact CAMS via email at technical@cams.com.au or call us on 1300 883 959.



LEVEL B HELMETS AND BALACLAVA REQUIREMENTS

Please note that if a competitor is using a Level B helmet during competition then a Level A balaclava must also be worn if [Schedule D](#) notes a Level B balaclava is required for that event. This situation covers competition at race events from club to national level (including private practice and demonstrations), gravel rallying at state and national level, tarmac rallying at club, multi-club and state level and off road at club, multi-club and state level.

The Level B balaclava regulation states **“A Level A balaclava is required, except where the driver / co-driver is wearing a helmet to Level A standard. If a Level A helmet is worn (for competitors only requiring Level B) then the wearing of a flame-retardant balaclava is not mandatory, but is recommended.”**

Level B helmets include the popular AS1698 helmets along with SFI 24.1, E22 and BS 6658-85 types. The specific balaclava required must meet the FIA 8856-2000 standard to guarantee the competitor's safety in case of a fire. If you see competitors using Level B helmets without a balaclava at the events specified above please mention this requirement to them immediately.

Balaclavas are easily available and range in price generally between \$49 and \$89. For full apparel requirements please refer to [Schedule D](#) of the CAMS Manual of Motor Sport or contact the CAMS Technical Team via technical@cams.com.au or on 1300 883 959.

3.5 FLAME-RETARDANT BALACLAVA

A	FIA 8856-2000 standard (see www.fia.com)
B	A Level A balaclava is required, except where the driver/co-driver is wearing a helmet to Level A standard. If a Level A helmet is worn, the wearing of a flame-retardant balaclava is not mandatory, but is recommended
C	Not mandatory; a motor sport standard balaclava is recommended
D	Not mandatory

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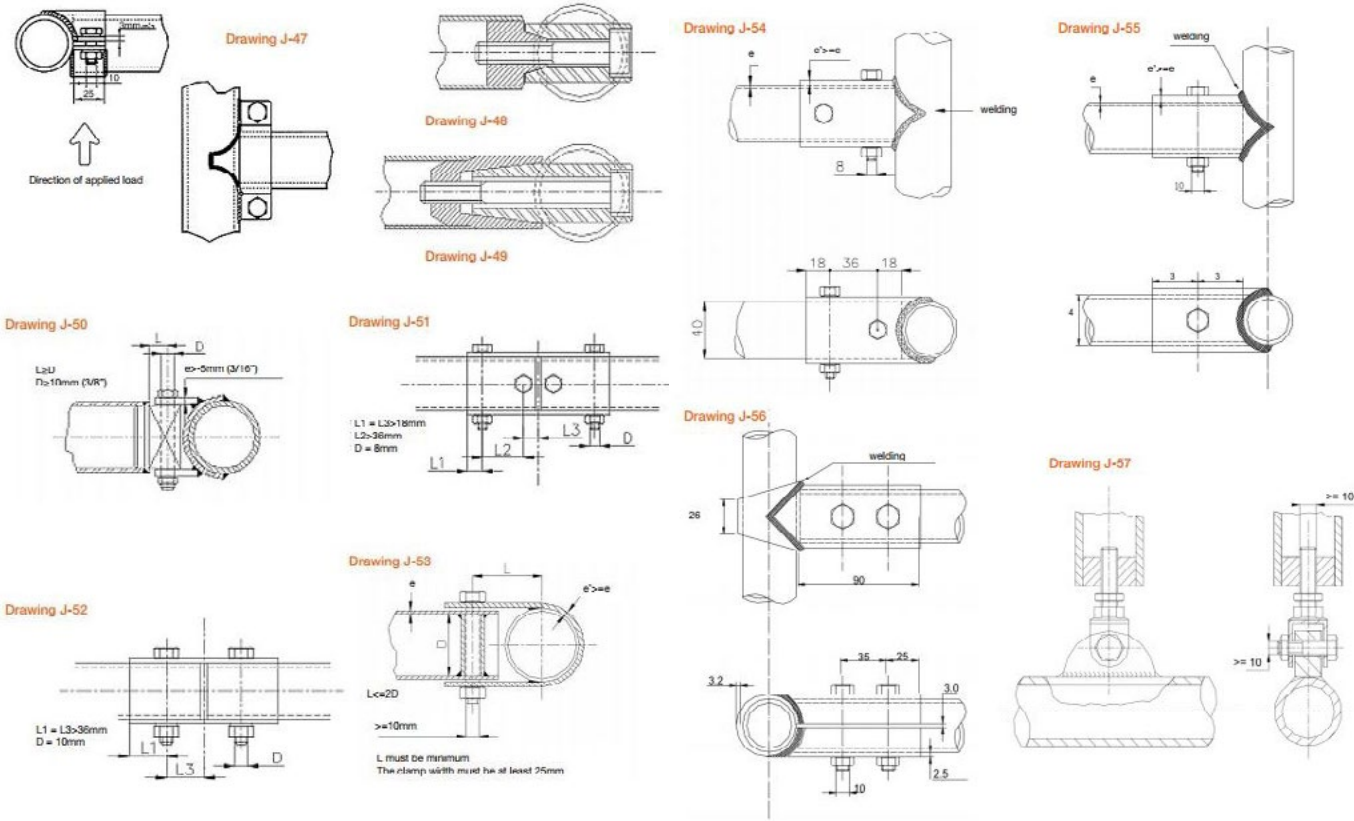
BOLT IN JOINTS WITHIN SAFETY CAGES

Recently CAMS Technical has had to reject several safety cage structures because the structures utilised bolt in joints which did not conform with [Schedule J](#) (as per drawings J-47 to J-57) or did not appear in the limited range of FIA tested and homologated joints available. In some instances customers had been sold joints as 'CAMS approved' by cage fabricators, when in fact they weren't approved or were 'copies' of FIA homologated joints.

If you are inspecting a cage structure which utilises a style of joint which isn't as per drawings J-47 to J-57 in [Schedule J](#) please contact CAMS Technical via email at technical@cams.com.au to confirm these joints are acceptable

before signing off on an application - noting the brand and model of the joints used along with photographs if possible. Re-using homologated joints with different structures from the original structure also raises issues which need to be checked.

Any fasteners used must have a minimum tensile grade of 8.8 according to the ISO standard. Please contact CAMS Technical via technical@cams.com.au or on 1300 883 959 for further information.



HELMET AND CAR CAMERAS

Further to the information released earlier this year, this article seeks to remind scrutineers on the use of cameras and some points to consider when deeming their use fit for purpose. CAMS Technical are working on regulations regarding the mounting of cameras but in the meantime here are a few guidelines.

Under no circumstances, aside from the F1 teams which have tiny cameras built into their helmets by the helmet manufacturers, are helmets to be fitted with cameras or even camera mounts. The FIA have advised that helmets are safety devices and should not currently be used for any other purpose. There may also be legal issues in regards to this, particularly for rally competitors on transport sections using open roads.

According to the Driver's Equipment section (Chapter 3, Article 1.3, "Modifications") [Appendix L](#) of the International Sporting Code, it is forbidden for a camera to be mounted on the helmet. "No helmet may be modified from its specification as manufactured, except in compliance with instructions approved by the manufacturer and one of the FIA listed standards organisations which have certified the model concerned. Any other modification will render the helmet unacceptable for the requirements of the present Article 1."

The SFI Foundation follow the same logic with their concern being that the camera and/or mount will act as an anvil against the helmet and cause impact where before there was space, i.e. contact with the cage, roof, seat, window, co-driver, etc. The SFI believe that the benefits of cameras from a marketing or entertainment point of view do not outweigh the risks associated with having such attachments on a helmet when there are other safer locations for cameras to be installed in a vehicle, such as the roll cage.

There is constant developing of both cameras and helmets however, so in the future we will surely see safe options developed between helmet and camera manufacturers which will pass FIA and/or SFI testing but at this stage please advise competitors against any fitment of any camera equipment or mounts to their helmets. Even mounts without the camera will render a helmet non-compliant.

For cameras mounted in the cockpit of a vehicle suction cups are adequate but the camera shall also be tethered. Use of a cable tie as the tether is adequate. GoPro® style rigid clamp systems are also acceptable, as are the stick-on mounts, using double sided tape such as the 3M® brand. Externally cameras should be mounted via rigid attachment, again the use of the stick-on mounts is acceptable.

Consideration should be given to the amount of the camera that is beyond the profile of the vehicle and perhaps presenting a further risk to other vehicles or even marshals, or in the case of a rally, spectators. Any externally mounted camera must be secure and therefore the use of a suction cup mount alone is not acceptable, as they shall require an additional tether. If you have any questions please contact CAMS Technical via email at technical@cams.com.au or call us on 1300 883 959.



*Photo by: Luke Pickerill
2012 Helmet Cam Award Winner*

KART SUITS VS RACE SUITS

At CAMS Technical we are often asked “Is it OK to use my kart suit to race in my car?” The answer is no. Karting suits with the ‘CIK’ label do not meet the requirements for competition outside of karting. Karting suits are mainly nylon and designed to be abrasion resistant in a similar way to motor bike apparel, while race suits contain nomex for flame resistance.

Nomex may be related to nylon but it has excellent thermal resistance for a polymer material and is much more suitable for closed car racing. The best way to clearly define a kart suit is via the label embroidered on the collar which will show

the homologation numbers beginning with the prefix CIK-FIA. This is generally followed by a year and a number (ie: CIK-FIA 2013/001).

You can also look out for the FIA Karting logo as shown below. Some confusion also seems to stem from the fact that both types of suits can also have an SFI label. Please check the numbers carefully on any SFI label however as this symbol does not automatically mean an article of clothing is flame proof. For auto racing SFI 3.2A/1 is acceptable at Level C standard while SFI 40.1/1 is purely for kart racing.



**SAMPLE SFI 3.2A/1 RACE SUIT LABEL
AUTO RACING (LEVEL C ONLY)**



**SAMPLE SFI 40.1/1 KART SUIT LABEL
KARTING ONLY**



**SAMPLE KART SUIT LABEL
KARTING ONLY**



**FIA KARTING LOGO
KARTING ONLY**

Other race suit options include the Level A option to FIA 8856-2000 standard or the Level B option to FIA 1986 standards. The Level A FIA 8856-2000 labels are completely embroidered into the suit collar, not a sewn on badge, and will always include the FIA logo, the FIA standard (FIA 8856-2000), the Homologation Number, the Manufacturer's name and the Year of Manufacture.

An older Level B FIA 1986 standard suit will appear similar but

the manufacturer's name maybe be embroidered or badged directly below the FIA label. The label will read “Norme 1986 / 1986 Standard”, contain the FIA logo and homologation number.

For full apparel requirements please refer to [Schedule D](#) of the CAMS Manual of Motor Sport or contact the CAMS Technical Team via technical@cams.com.au or on 1300 883 959.

FIA 8856-2000 STANDARD EXAMPLES – LEVEL A RACE SUITS



FIA 1986 STANDARD EXAMPLES WITH AND WITHOUT MANUFACTURER'S NAME – LEVEL B RACE SUITS



OPEN OR CLOSED?

Recently an issue arose around the definition of an open car and a closed car and therefore regulations regarding the wearing of goggles. In the CAMS Manual "Definitions – Technical" an Open Automobile is defined as: **"An automobile without a supporting structure between the tops of the windscreen pillars and those of the rear window (if fitted)."**

Therefore any vehicle which has a permanent supporting structure between the top of the windscreen pillars and the rear window is considered a closed vehicle. This definition also then means that Targa roofed vehicles are open vehicles, not closed, as their supporting structure is not joining the tops of the windscreen pillars but rather joining at the centre.

Vehicles with a removable hardtop option are considered as closed provided the hard top is fixed in a manner that would require the use of tools to remove it. The hard top must also be installed to the manufacturer's specifications. If a car is fitted with a canvas top, tonneau cover or other cover of soft material it is still considered as open and these covers must be able to be removed without tools.

According to the FIA regulations **"Convertible vehicles must comply in all respects with the specifications applying to open cars. In addition, cars with a (permanent) rigid retractable roof must be driven exclusively with the roof closed and locked up."**

The open or closed status of a car doesn't impose the mandatory use of full face helmets but it is highly recommended to reduce the risk of possible injury from track or race debris, especially if a car is missing its front windscreen.

It is mandatory though that **any open car competitor wearing an open face helmet must wear goggles or a visor.** These goggles must not be fitted with glass lenses, require an elastic strap behind the head or helmet and should comply with standards AS1609-1981, BS4110Z or an international equivalent standard.

If you have any questions regarding this or other issues please contact CAMS via email at technical@cams.com.au or historics@cams.com.au or call us on 1300 883 959.

Photo: Birtles & Rex the wonder dog, courtesy of the National Library of Australia VN3303076-V.



ZEAL RACE SUITS REMOVAL FROM FIA 8856-2000 STANDARD

Please note that Zeal Race Suits manufactured by Zeal in Pakistan with the homologation number RS.226.12, **regardless of the validity date**, are no longer considered to comply with the FIA Standard 8856-2000. For safety reasons, use of these race suits is prohibited, effective immediately.

Zeal are still falsely advertising and selling these race suits on their website as FIA 8856-2000 standard so please spread the

word! The FIA are aware of this and doing what they can to have this advertising removed from the Zeal website. For the full FIA list of 'Protective Clothing for Automobile Drivers Homologated According to the Standard 8856-2000' please follow this link [Technical List No. 27](#)

If you have any questions regarding this please contact CAMS Technical Team via technical@cams.com.au or on 1300 883 959.



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NOW TAKING FAQs...

Recently we have received a request by a scrutineer to mention the non-conformity of cars, especially from regional areas, in relation to both vehicle numbering and safety cage padding. If you have a Frequently Asked Question you would like highlighted in Scrutineers News please email us: technical@cams.com.au

Vehicle markings should be as per [National Competition Rules #147](#) and #155 and [Schedule K](#) for Markings on Automobiles as per the [CAMS Manual of Motor Sport](#). Article 2.1 of [Schedule K](#) contains a comprehensive table with discipline variant information for **vehicle numbers requirements**. For competition numbers Helvetica Bold, Zurich Bold and Arial Bold are all fonts which comply, although some series and championships may have alternative styles as per their own approved sporting regulations.

For numeral spacing details refer to article 2.4 of [Schedule K](#) to ensure correct placement according to the category type. Generally no numeral should be less than 40mm from the edge of another numeral or the edge of the background. No adjoining advertising should be any closer than 120mm to any part of the competition numbers also.

For **drivers' names**, on closed cars taking part in an Australian

Championship, their surname must be displayed on the lower edge of each rearmost side window or as specified by the Chief Scrutineer. The surname lettering should be as per Figure K-4 (below), beginning with a 100mm capital and followed by 60mm lower case text in Helvetica Bold, Zurich Bold or Arial Bold font. In competitions where name displays are optional but are used, they should still comply with this regulation. International events will also require the national flag of the ASN of each driver and co-driver to be shown.

For Historic cars please refer to page 4 of [Schedule K](#) for detailed information of historic requirements. For information on mandatory advertising space, use of windscreens and windows for advertising and the fitment of P plates please refer to page 3 of [Schedule K](#) or contact the CAMS Technical Team via technical@cams.com.au or on 1300 883 959.

Figure K-4

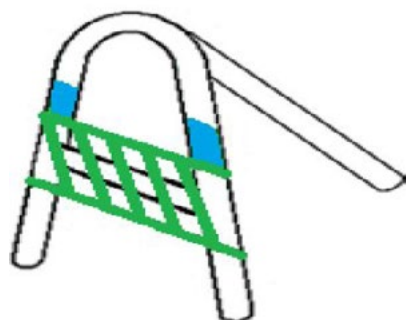


Safety Cage Padding

From 1st of January, 2014 all vehicles where a safety cage is required, as per article 3 of Schedule J, will be required to be fitted with safety cage padding as per article 11 of Schedule J. This padding must comply with SFI 45.1 (for bar work) or SFI 45.2 (flat padding) specifications except for international level competition where FIA standard 8857-2001 is required.

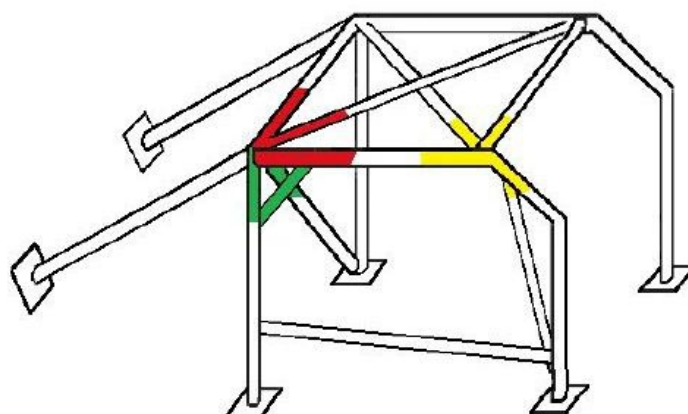
When fitting the SFI 45.1 padding to bent bars it can be useful to wait for a warm day, leave the padding the sun for a time and then mould it to suit the bar. All padding should be fitted to the manufacturer's specifications, however the connection method does not need to be flame proof, i.e. cable ties as adequate.

Type 1 Solo Roll Bars it is often difficult to fit the SFI 45.1 or FIA 8857-2001 padding so SFI 45.2 flat padding can be used as per the diagram below. The large green area would have flat padding (SFI 45.2) mounted on a flat surface while the blue area may require padding dependent on the driver's height with care taken not to block any air intakes. On some Type 1 Solo Roll Bars the bar work will actually be enclosed in the body work. When this is the case a head rest of free material can be used but SFI 45.2 material is recommended.



For a Type 3 Full Safety Cage it would be expected that the **red** area (on the diagram below) would be padded with SFI 45.1 material. For the **green** area padding would depend on if the seat being used had a head rest or side wings. Padding in the **yellow** area is dependent on the seating position of the driver and co-driver and is at the scrutineer's discretion.

For Type 2 Half Safety Cages padding is as per the **green** and **red** notes for the main roll bar and the diagonal brace on the main roll bar. As scrutineers you need to be comfortable that any part of the safety cage where you think a competitor's head may hit is padded.






COFFEE QUOTES: CONTROL + F FOR FAST FACT FINDING!

As a draftsman for many years I won't lie when I tell you I have a lot to learn about word processing software these days. I was usually more a pictures than words girl, unless it was words about cars of course! Yet one key function in my role here at CAMS Technical is to find data and find it fast, especially when we have a CAMS member on the phone with a tricky question.

With the CAMS Manual of Motor Sport predominately online and the wealth of information on the FIA website I thought I'd share with you THE single best thing I have learnt since coming to CAMS without a doubt... 'Control + F'.

For the pages and pages of rules and regulations and acres of websites we use each day this command allows us to search and find absolutely anything instantly! Simply open a PDF, webpage or word document and hit the 'Control' key and 'F' simultaneously and voila! A box will appear awaiting your key search word. Hit enter and you're instantly at your topic of choice.

Gone are the days of trolling through pages,  +  = facts found!

Simone Martin
Motor Sport Coordinator - Technical



NEXT ISSUE

If you wish to make a contribution to the Scrutineers Newsletter then please send through your article or ideas to CAMS Technical - technical@cams.com.au

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