

# PREPARING FOR DRIFT COMPETITION

## NOTES FROM Graeme Westwell (Chairman – Scrutiny Panel – Tasmania)

### HELMETS (section 23.1 – drift regulations)

Competitor's attention is drawn to sections b & c of the above regulations (painting and decoration of helmets and general condition as presented to scrutiny).

### CAMERA MOUNTINGS

Competitors are reminded that all objects in the car must be mounted to withstand a load of 25G. The use of the 6mm threaded tripod hole is insufficient.

If a camera of any size is mounted externally to the car it must be mechanically secured (attached by screws or bolts). Suction cups and/or race tape is not sufficient.

### TRANSPARENT FILM (on headlight glass)

Required when two cars are competing together.

### FIRE EXTINGUISHERS (Schedule B – Part 4 – Drifting Regulations)

A fire extinguisher must:

- (i) comply with Australian standard 1841 (save that extinguishers which meet AS1841.2 are not permitted;
- (ii) be of at least 900g capacity; and
- (iii) must remain restrained under an acceleration of 25G. This means no mounting brackets made of plastic and the means of attachment to the structure of the vehicle must be by bolts with large flat washers on the underside of the attachment points.

### SAFETY HARNESSSES (Schedule A – part 10 – Drift Regulations)

Safety harnesses or seat belts must be complete units sourced from a recognised manufacturer. It is not permitted to mix parts of seat belt / harnesses of different types or manufacturers. Safety harnesses or seat belts must be fitted and worn in accordance with any manufacturer's instructions or limitations.

It must be stressed that any seat belt harness which passes through any aperture in the top of a seat **must** have a gap above and below the belt when it is worn by the driver.

Any rear mounting position of the shoulder straps must go to a manufacturer's fitted mounting point, or a hole drilled to the correct size and the correct mounting bolt used with the correct size reinforcing plate fitted on the underside. The angle of the shoulder straps must not exceed 40°.

## General Requirements of Automobiles in Drifting Competitions

### Eligible Vehicles

Drifting events are generally restricted to series production automobiles with at least two seats. The nature of the event generally renders front wheel drive and all wheel drive vehicles unsuitable.

Imported vehicles, including LHD are acceptable, and vehicles need not be registered.

## Fuel

Competitors must only use Commercial Fuel as defined by CAMS in Schedule G. Competitors are reminded that certain "Commercial Fuels" as defined by CAMS are not legal for Road Use, and their use may render the competitor liable to penalties under civil legislation.

## General Safety Requirements

All Automobiles in Drift Events must comply with Schedule A of Section 6 of the current CAMS Manual of Motor Sport, or CAMS Competitors Handbook for the current requirements.

All Automobiles in Drift Events must comply with articles 1, 2, 6, 10, 11, 12, 13, 14, 15 and 17 of Schedule B of Section 6 of the current CAMS Manual of Motor Sport. Notwithstanding the foregoing, automobiles registered for road use shall not, when competing in Drift events, be required to comply with the provisions of Articles 2 and 11.

Drivers must wear apparel as would be required under Schedule D for Speed Events

For introductory purposes, these requirements are summarised below. These are presented for information only and do not supersede the requirements of Schedules A, Band D should a conflict exist between them

# GENERAL REQUIREMENTS OF AUTOMOBILES

## SCHEDULE A - ALL AUTOMOBILES SHALL, OF NECESSITY, IN ALL COMPETITIONS:

1. comply with the definition of an automobile;
2. be fitted with some form of protection between engine and driver's compartment and sufficient for preventing the passage of flame;
3. be so constructed that the driver is protected from the entry of foreign matter into the driving compartment from the road or road wheels;
4. be equipped with a transmission system so arranged that:  
  
the propeller shaft and universal or Cardan joints, if passing through or beneath the passenger compartment, shall be under the floor, or fitted in tubes or casings. Such floor, tubes or casings shall not be of a temporary nature, but shall be joined together and firmly fixed to the coachwork or chassis. Any chains used in the transmission of power or driving any auxiliary component shall be effectively guarded;
5. be arranged so that all fuel tanks are vented externally to the bodywork;
6. if manufactured prior to 1 January 1978 (or otherwise does not comply with ADR25A) and **not** registered for use on public roads, have any steering column locking device removed or disabled;
7. if required to be fitted with roll-over protection, be equipped with such protection in accordance with the provisions of "Roll Over Protection" in this document;
8. unless specifically approved by CAMS, use fuel only as defined in this document;
9. where required, be fitted with windows (including windscreens) which, if of other than glass, are clear, transparent and free of colouring; for races and multi start speed events glass windows must not be coloured or tinted after production.
10. be fitted with safety harness or seat belts as prescribed in this document
11. be permitted to have factory fitted ASS anti-lock brake) systems and SRS supplementary restraint systems - (airbags) disconnected or deactivated;
12. be fitted with steering wheels which do not incorporate components made from wood, unless such a steering

wheel is the retained original component

13. where fitted with any storage vessel located within the cockpit containing more than 500ml of hot liquid (other than that fitted by a series car manufacturer), have such vessel enclosed in a fully sealed, externally vented compartment;
14. Where fitted with rigid brake pipes have such rigid brake pipes made of steel ['Bundy' tubing or equivalent], and must be installed in a manner which protects them against vibration and damage.

## **SCHEDULE B - ALL AUTOMOBILES SHALL, OF NECESSITY IN ALL SPEED EVENTS\***

*\* Note: Drift events, by definition, are not speed events however as the activity is conducted on licenced circuits, there are certain elements of Schedule B that are mandatory (i.e. article 17) or advisory (i.e. Article 8). Refer to the "General Safety Requirements" to determine those articles applicable to Drifting competition.*

1. Be fitted with at least two independent fastening systems, of adequate strength and limited extensibility, which simultaneously hold the bonnets or panels closed.

In other than races, registered production cars manufactured after 1 January 1973 and other cars as explicitly approved by CAMS may utilise the original, unmodified manufacturers components for securing the bonnet, without the use of a secondary restraint mechanism;

2. (If fitted with crankcase breathers discharging to atmosphere) have fitted to such breather/s an oil-trap container (which must be empty at the start of the competition) of at least two litres (for cars of under 2000cc) or three litres (for cars of over 2000cc) except in Autocross, Rallycross and other events on unsealed surfaces, save however, that Supplementary Regulations may require fitment for any particular event;
3. be fitted with a roll bar or roll cage and safety harness complying with such specifications as are determined by CAMS from time to time (see Schedules J and I).
4. be fitted with a fire extinguisher or fire extinguishing system in working order and of a type and capacity as specified in Schedule H as is appropriate;
5. be so constructed that, in the event of any breakage, any longitudinal tailshaft, its components or mountings shall be effectively prevented from striking the ground;
6. be fitted with wheels which meet the specifications determined by CAMS from time to time (see Schedule E);
7. be so constructed that any aerodynamic device fitted is in accordance with specifications determined by CAMS from time to time (see Schedule F);
8. comply with any Supplementary Regulations for a specific event which requires the fitment of locking or wiring devices adequate for the prevention of any loosening of any oil drain plug;
9. be fitted with a scatter shield if required under the provisions of Schedule M;
10. on each throttle, whether butterfly, slide or other type, be fitted with a return mechanism which in the event of the throttle linkage becoming detached will in all cases return each throttle to the closed position;
11. with the exception of vehicles manufactured prior to 31 December, 1973, and fitted with the manufacturer's original specification braking system, be fitted with a double circuit braking system so arranged that the pedal normally operates on the four road wheels and, in the event of leakage at any point in the braking system, the pedal shall still control two wheels on the same axle. Provided that is "straight line" Sprint Events, and in events exclusively for historic or vintage cars, braking systems operating on two wheels of the same axle shall be acceptable;
12. be fitted with an operable reverse gear; and
13. (for other than 1st Category vehicles) be fitted with an exhaust system the outlet pipe/s of which shall be directed either rearwards or sideways. If rearwards, their orifices shall be between 100mm and 450mm above the ground

and they shall not protrude by more than 150mm beyond the rearmost portion of the car. If they are directed sideways, their orifices must be located aft of a vertical plane passing through the midpoint of the wheelbase. They may neither project in any way beyond the maximum width of coachwork nor terminate at a point more than 50mm within the projected plan of the adjacent coachwork. Adequate protection shall be provided to prevent heated exhaust pipes from causing burns;

14. have, on the external coachwork, a blue triangle of sides 150mm, which indicates the position of the battery;
15. be fitted with a flame- or liquid-proof bulkhead, which may be of transparent material, which effectively separates the compartment occupied by the crew from any component of the fuel tank or refuelling system;
16. for races and multi-start speed events, all external forward facing glass components, save for the windscreen shall be covered by a transparent film, which shall effectively inhibit broken glass from being spread on the track. In all cases, light emitted from the head lamps must not be red; and
17. be configured so that, when measured in competition conditions at 30m from the track edge, the sound emission from the vehicle does not exceed 95dB unless specifically approved otherwise.

Notwithstanding the above requirements automobiles registered for road use shall not, when competing in Single and/or Multi-car speed events (not racing), be required to comply with the provisions of sub-section 2, 3, 5, 8, 9, and 11 of this schedule.

## APPAREL

### Headgear

- a. It is compulsory in all drifting competitions, that drivers wear helmets of a standard, design, construction and fitting approved by CAMS. Helmets not marked as complying with the approved standard may be approved by CAMS under certain conditions.

Helmets bearing any of the following marks are approved for use in drifting competitions

AS1698	Australian standard
Snell SA95, SA2000 or SA2005	USA standard
SFI Spec 31.1,31.2, 31.1A, 31.2A	USA standard
SFI Spec 24.1	"junior" licence holders only
E22 (with 02, 03, 04 or 05 amendments)	European standard
BS 6658-85 Type A and AIFR (incl. amendments)	British standard
FIA 8860 – 2004	FIA standard

- b. No helmet may be modified from its specification as manufactured except in compliance with instructions approved by the manufacturer and one of the standards organisations listed above, which certified the model concerned. Any other modification will render the helmet unacceptable for the requirements of this regulation.

Decoration of helmets is potentially dangerous, and members are warned of the hazard of using paint on approved helmets. Paint, stickers and transfers, or surface treatments can react with helmet shell material and affect its protective capacity, therefore, where a manufacturer provides guidelines or restrictions on the painting or decoration of helmets, these must be followed, using only paint or surface treatment specified by them (eg, air drying acrylic, polyurethane enamel or others) and preferably a painter having their approval. This is particularly important for injection-moulded shells which are not usually suitable for painting.

The shell being painted should be efficiently masked as paint penetrating the interior can affect the performance of the helmet liner.

Paints requiring heat curing should not be used and any process should not exceed the maximum temperature of conditioning of the helmet in the standard to which it is approved.

The manufacturer's instructions should also be consulted for any considerations on the use of stickers and transfers.

- c. Drivers are cautioned against using helmets which have been damaged or involved in accidents.

## CLOTHING

In drifting events clothing for drivers and crew members must cover from ankles to neck to wrists. Clothing and footwear of flammable synthetic material, such as nylon, is not acceptable.

No driver shall participate in any competition unless wearing suitable and appropriate footwear. Prohibited are, for example, thongs, Roman sandals and high-heeled shoes.

Drivers shall continue to comply with these requirements until such time as they leave their automobiles.

## FUEL

Unless expressly permitted otherwise by CAMS, all fuel used in any drifting competition or practice must comply with the prescriptions listed here. It must be used **without** any additives other than those permitted in below. The only fuels permitted in drifting competition in accordance with Schedule G are Commercial fuels as listed below.

### Commercial Fuel

- a) Commercial Fuel: A fuel produced by an oil company for sale in the Australian general transport fuel market. Such a fuel must comply fully with the Fuel Standard (Petrol) Determination 2001, including amendments as made under the Federal Government Fuel Quality Standards Act 2000.

Competitors are reminded that certain "Commercial Fuels" as defined by CAMS are not legal for Road Use, and their use may render the competitor liable to penalties under civil legislation.

- b) Liquefied Petroleum Gas: The fuel must be a commercial LPG being a mixture of Butane and Propane, of a type which is dispensed from a service station pump. Where a vehicle utilises LPG, a sign in the form of the white letters LPG on a red reflective background, as per drawing G-1 must be placed immediately to the left and centralised vertically to all competition numbers.

### Additives

An additive is considered to be any substance, other than air, added to the fuel subsequent to its purchase from the producing oil company or recognised distributor. Nothing in the foregoing shall be deemed to prohibit the addition of water, an approved lead replacement additive\* or a lubricant provided that such additive does not increase the octane rating, oxygen content or specific heat content of the fuel.

List of Approved Lead Replacement Additives;

Valvemaster@,  
Redline Lead Substitute@,  
Penrite Valve Shield@,  
PM 800Fuel system Conditioner@,  
Elf Millesim@.

## ROLL OVER PROTECTION

- a) All open cars (i.e.: cars without a supporting structure between the top of the A Pillars and rear window) must be

fitted with Roll Over Protection

- b) Whilst not mandatory for closed cars, a Roll over Protection Structure approved by CAMS is highly desirable.
- c) Roll Over protection devices, constructed outside the parameters of those of the CAMS ROPS regulations may be incorporated in closed cars; however the Chief Steward must individually acknowledge the fitment and design as being appropriate for the activity.
- d) For roll over protection systems to be approved by CAMS see Schedule J of the CAMS Manual of Motor Sport.

## SEAT BELTS / HARNESES

- a) Safety belts or harnesses must be worn at all times whilst the vehicle is in motion both on and off the competition surface. Only a standard seat belt is required for drifting but if a harness is fitted to a vehicle it must be of an approved type. The approved seat belt and harness standards are listed below in Table 1. '
- b) Safety harnesses or seat belts must be complete units sourced from a recognised manufacturer. It is not permitted to mix parts of seat belts/harnesses of different types or manufacturers. Safety harnesses or seat belts and must be fitted and worn in accordance with any manufacturer's instructions or limitations.
- c) Important note: Some safety harnesses and seat belts specified by CAMS may not comply with civil registration requirements. Where the vehicle is to be driven on open public roads, it is the competitor's responsibility to ensure that the vehicle complies with all relevant State and territory legislation.
- d) It should be noted that some belts and harnesses have 'used by dates" that have been set by the manufacturer or certifying body. In order to be considered both safe and legal, these expiry dates MUST be observed.

**Table 1**

Type	Configuration	Acceptable Standards	Notes
A	6 strap harness	FIA 8853/98 <i>Note 1</i> FIA 8853 - 1985	1 "Not valid after XXXX" shown on each strap  Harness not to used after 31 December of the year stated (XXXX)  This five year life is imposed by the FIA
	5 strap harness	SFI 16.1 <i>Note 2</i>	
B	4 strap harness	FIA 8853/98 <i>Note 1</i> FIA 8854 – 1991 SFI 16.1 <i>Note 2</i> AS 2596 ECE R16	2 Harness to be returned to original manufacturer for re-webbing within two years of the date of manufacture shown on SFI label.  This requirement imposed by SFI Foundation (inc)
C	Lap Sash Belt	AS 2596 ECE R16 AS E35	Seat belts as fitted to production cars as standard equipment and marked as complying with ADR 4/00 or 4/01 shall be deemed as complying with AS2596.