

# 2012 GROUP A HOT-RODS SPECIFICATION

**FROM 2013 ALL CARS MUST FULLY COMPLY WITH THE ORC STOCK ROD RULES WITHOUT EXCEPTION.**

**ALL NEW RULE CHANGES ARE IN BOLD PRINT. THESE RULES WILL COME INTO EFFECT FROM THE 1<sup>st</sup> MARCH 2012.**

## VIOLATIONS.

Cars, engines and fuel will be checked on a random basis at the end of a meeting for eligibility. When referring to the engine or construction rules and regulations, the principal will always be:- unless permission is specifically granted to make modifications or any variations, nothing may be done to alter or change in any way the standard parts. I.E. Unless these rules state you can do it, you CANNOT do it. Violations will result in an immediate suspension of all racing facilities and any refusal will also result in an immediate suspension. Drivers are reminded that scrutineer checks can be carried out at any time, and most certainly at official championships. If parts are suspected of being illegal make sure you leave them with the promotion if you do not agree, if you refuse it will automatically make the parts illegal.

### 1. DEFINITION.

Group a Hot-Rods are a non-contact formula using suitably modified small family saloon and hatchback cars. Cars and engines may be interchanged. It is important to remember to keep within the spirit of the rules. If you are in any doubt about something then ASK.

The Scrutineers decision will be final.

### 2. WEIGHT

Warning : Cars can be weighed at any time before, during or after a meeting, without driver. They must always achieve the minimum weight; the adding of fuel or any other liquids is not allowed to achieve this minimum weight. The minimum car weight for **REAR WHEEL DRIVE CARS WILL BE 630Kg and for FRONT WHEEL DRIVE CARS WILL BE 680Kg.** The use of ballast to achieve this weight must be steel plate bolted to the floor. This internal plating must be of equal proportions on both sides and front to rear of the car both in construction and gauge. I.E. If a 10Kg weight is fitted in the front offside foot well, a 10kg weight must also be fitted in the nearside foot well. Bolts of the same size and material must be used to fit the plates, and the bolts must be welded.

### 3. TYPE OF CAR.

You may use any right hand drive steel bodied saloon, coupe or hatchback The body must not be lowered, narrowed or shortened in any way and the floor must be complete up to the front of the rear seats. The rear of the engine must not be further back than the original line of the bulkhead.

### 4. ENGINES. 1400cc

Engines must be as produced by the manufacturer, two valves per cylinder, i.e. no twin carburettor set ups, where not originally specified. No fuel injection or turbo charging is permitted. It is permitted to use an engine or block assembly from another model of the same manufacturer if all technical specifications are the same. Fuel injected engines may be used – see Inlet and Exhaust Manifold below. Engine mountings to remain standard, with the exception of FWD cars where the top engine mounting (by valve cover) may be solid. Where an engine swap i.e. ( Vauxhall 1400 into a Starlet ) fabricated mounts are acceptable.

**Cylinder Block.**..Nominal overboring to a maximum of 0.060” (1.5mm) is permitted. Skimming of the block on the head gasket surface only is permitted. No other modifications to the block are permitted.

**Cylinder Head.** The skimming of cylinder head is permitted on head gasket surface. Cylinder heads must remain standard and unworked. A 3 angle cut is permitted, but there must be no machining or fettling either side of the valve seat. The measurements of the angle

valve seats must be as manufacturer's specifications with valve seat width free. The valve length must remain within standard manufacturer's tolerances (i.e. the length as supplied to the industry, not a minimum service length). Eg. Vauxhall 104.25mm-105.35mm, Inlet Valve diameter 38mm and exhaust valve diameter 31mm. Valve springs must remain as standard, and must be the original manufacturer's part. The following must not be machined, repositioned or modified in any way: valve caps, collets, valve guides, spring seats and valve stem oil seals, with the exception of Corsa/Nova lash caps which may be of competition type. Solid lifters may be fitted. Hydraulic lifters may be welded or modified to be solid and shimmed. Fuel injected engines may be used, but injection inlet manifold must be replaced with a conventional carburettor version within the manufacturer's range. Only locating holes and gasket may be altered to allow manifold to fit. (Manifolds and carburettors from larger cc version cannot be used.) Peugeot 106 Cylinder heads and rocker gear are not interchangeable.

- i)* If the oil feed to the cylinder head becomes mis-aligned when head is surfaced it may be re-aligned.
- ii)* Head bolts may be shortened or washers may be used.
- iii)* Bronze valve guides are NOT permitted unless fitted as standard, but it is permitted to use a thin wall bronze sleeve in existing guide.
- iv)* Inlet and exhaust valve seats may be lowered, (i.e. moved away from pistons) but the valve head must sit level with or below the combustion chamber roof.

**Pistons.** .....Manufacturers pistons or original replacement pistons must be used and must not be altered in any way other than for balancing as specified below. Nova/Corsa if a small valve cylinder head is used, it must be with original compression ratio pistons (i.e. 9.4..1), the big valve cylinder head may use 9.4..1, 9.8..1 or 10.0..1.

**Camshafts.** .....The camshaft may be changed to that of a competition type but no other parts may be altered to accept the camshaft other than those permitted within these rules. The only exception to this is for the Vauxhall Nova/Corsa engine where the cam box to cylinder head surface of the cam box may be surfaced (level). Offset dowels, drilling or pinning is permitted. Vernier timing wheel is permitted.

**Carburetion.** .....Must remain as standard and although jets and needles are free, they must remain fitted. Trumpets or stubs are not allowed on carburettors. Choke butterflies, cold start equipment and economy devices can be removed. The VV carburettor on CVH engines may be replaced with a Weber 32 IBF. A 32 DHA carburettor is allowed on Kent engine. A 32 DGA or 32 DGR carburettor is permitted on either the CVH or Kent engine. Throttle butterflies may be modified to open together.

**Inlet & Exhaust Manifold.** . Manifolds to be of standard type to that of the engine fitted, unless otherwise specified. Exhausts with a hot spot may be blanked off. Water circulation holes may be blanked off.

**Distributor** .....Must be the standard type. The mechanical and vacuum advance may be altered. The vacuum advance may also be removed. No electronic ignition is permitted unless fitted as standard. Where the engine is not fitted with a distributor as standard and it is not possible to fit a distributor from the same vehicle manufacturer, certain types of Lumination will be allowed to be fitted. (The Renault Clio 1.4 may fit Lumination Kit No C410 ECU. Top line mapped only. Max advance by 3750-RPM ignition may be advanced only; no retarding. Whatever advance figure appears at 3750-RPM must be continued to end of rev range). Rev limiters are allowed.

**Balancing**.....Balancing is permitted by spot machining only. Spot machining means either hand grind, drill or machine. When balancing pistons and con rods, at least one of each must be as original. The flywheel and clutch assembly may be balanced.

**Con Rods**.....Any big end bolts may be used, but con rods must not be machined to accommodate them.

**Flywheel** .....Lightening of the flywheel is permitted. FWD/RWD Conversions. Where there is an engine swap ( Vauxhall 1400 into Starlet ) you must use the flywheel from that engine.

**Sundry** .....The engine must be fitted with a metal catch tank of 1 litre minimum capacity connected to the engine breather system, fitted in the engine compartment. Bottom Crankshaft pulleys are optional.

**Sump**.....Standard sumps must be used and can be baffled. Pick-up pipes can be modified within the confines of the sump. FWD/RWD conversions, the sump maybe modified to fit, i.e. ( Vauxhall 1400 into Starlet ) All modifications are to be kept to a minimum. The modifications are purely to make the engine fit.

## **TRANSMISSION**

The gearbox, gearbox mountings and final drive must remain standard, but gears and ratios from the same manufacturer may be interchanged and the gearbox and final drive may be interchanged within manufacturer's range. The differential assembly may be locked by way of welding. All of the above exceptions must be achieved without machining or modification of the standard parts.

### **FWD/RWD Conversions**

Any standard production gearbox can be used from any manufacturer. The casing and internals must remain standard, but the gears are interchangeable from within the manufacturers range. All the above exceptions must be achieved without machining or modification of the standard parts. Gearbox mounts and propshafts can be fabricated. You may use an adaptor plate or an aliminum bellhousing to allow the fitment of the engine/gearbox installation. The method of clutch operation is free. The engine and gearbox must remain centrally positioned and the engine must not be located beyond the original bulkhead line. You may make a minimum hole in the bulkhead to allow for the fitment of the distributor but this must be boxed in to complete the firewall.

**Driveshafts** .....Must be the original fitted to make and model and must remain standard. The fitting of spacers is not permitted. Drive shafts from automatic versions are not permitted.

**Propshafts** .....May be modified or interchanged from manufacturers range.

**ENGINES;** Citroen AX-1350cc,  
Citroen Saxo,  
Fiat Uno-1301 or 1372cc,  
Ford Fiesta-1392cc,  
Peugeots 106 & 205-1360cc,  
Renault Clio-1400cc,  
Vauxhalls, Corsa-1396cc, Nova-1400cc & Tigra-1400cc ( Run as Nova spec. )  
All carburettor/venturi sizes for the above, are to be the original standard part.

#### **4A. FORD 1600cc CROSSFLOW**

You may use the above named engine in the following specification only.

- (a) Nominal bore plus 60 thou overbore. Standard stroke.
- (b) Block and head may be skimmed. Pistons may not protrude above the block. Pistons may not be skimmed or modified in any way.
- (c) Camshafts are free, vernier cam wheels allowed. Cam wheels must be driven as original design. Standard rocker gear only to be used.
- (d) Head. Only 1600cc Crossflow allowed as fitted originally. No modification is allowed. Valves must be standard 1600cc Crossflow. Valve seats may be re-cut. No gas flowing or adding of material to the ports or combustion chamber, no double valve springs allowed. Any single valve spring may be used that fits without any modification
- (e) Fly wheel and clutch are free.
- (f) No competition gaskets allowed.
- (g) Only the standard Bosch or Motorcraft distributor allowed with points and condenser or electronic ignition. Mechanical and vacuum advance may be altered.
- (h) The charging system. Power steering pumps may be removed, fan belts are free but pulleys must remain standard, with the exception of the bottom pulley which may be steel.
- (i) Oil coolers may be fitted using a sandwich plate between the oil filter and block. An effective oil catch tank must be fitted. Oil coolers and oil catch tanks must be fitted within the engine compartment. No turbos, fuel injection or forced induction of any kind. No remote oil coolers.
- (j) Any standard replacement crossflow pistons may be used. No Powermax or high compression pistons allowed. Any make of piston ring may be used providing the number of rings remains the same as standard and no machining of the piston or piston rings apart from gapping is allowed.
- (k) Blocks may be rebored, honed, sleeved to standard and rebored, surface ground, line bored and edges broken. No other modifications.
- (l) Crankshaft may be balanced and/or tuftrided with fly wheel and pulleys, no other balancing or lightening allowed.
- (m) Inlet manifold must be standard and may not be gas flowed or faced to alter the angle of the carburettor. No material may be added to the gas flow area. Water ways may be blanked off but not removed.

#### **5. CARBURETTORS. 1600 Crossflow**

Only the standard twin choke carburettor may be used on the Ford 1600 Cross flow. A carburettor adaptor plate may be fitted up to 1 inch thickness, but the carburettor must occupy its original position.

**6. GEAR BOXES.** Standard

**7. DIFFERENTIALS.** RWD are Free

## **9. STRENGTHENING.**

There is no restriction on welding to strengthen the car. You must cover the headlamp and tail lamp orifices. Wheel arches must be fitted to cover protruding wheels. No sharp edges are to remain on the wings. The following panels may be replaced with Kevlar or fibreglass - front and rear wings, front and rear panels, boots, bonnets and doors, no adding of materials i.e. no tubing, box or angle iron for armouring at the front of the car is allowed. Any panels changed or repaired must be replaced by metal of the same thickness as original. Replacement door sills should be no more than 6 - 8" high. No drilling of holes in the bodywork is allowed with the exception of the side skirts.

## **10. AEROFOILS AND SPOILERS.**

Aerofoils must not be fitted further forward than the rear axle. The aerofoil must not exceed 12" in height above the roof line and must not exceed 18" long from front to rear.

## **11. WHEELS AND TYRES.**

Any one piece wheel may be fitted to a maximum size of 6 x 13. Maximum wheel spacer size permitted is 1\4" all round. The only tyres permitted are the Yokohama 185\60 A021R or 185\70 A021R. FWD cars must have studs fitted on the front wheels.

## **12. SUSPENSION.**

Suspension components are free but must remain as original configuration i.e. struts to remain struts and wishbone to remain wishbone. You must also retain a cross member, chassis rails and inner wings. Any bracing fitted within the engine compartment must not protrude further forward than the centre line of the front wheels. The rear of the car may be space framed from the rear seats backwards only.

## **13. BACK AXLE.**

Free except no quick change rear ends allowed. No Birdcage axles allowed

## **14. ROLL CAGE.**

The minimum requirement is a four poster cage in support of the door pillars and front windscreen pillars made of steel and securely bolted or welded on all joints. The minimum thickness must not be less than 1.25" x 1.25" x 10 gauge tube. Two chicken bars in the drivers and at least one chicken bar in the passengers door is compulsory. Chicken bars must be attached to the roll cage. All roll cages must terminate at least 4" from the back panel. A bar must be fitted in the front windscreen aperture.

## **15. BRAKES.**

Must be effective on all four wheels. A handbrake is compulsory. The pedal box must remain in original position.

## **16. MIRRORS.**

Interior driving mirrors must be used. Sideview mirrors if fitted must not protrude outside the car.

## **17. DOORS.**

The drivers door may be hinged and fitted with a secondary fastening. All other doors must be securely fixed shut. A window net on the drivers side is compulsory and this must be of a manufacturers cloth type material and must be detachable and not fixed to the door.

## **18. COOLING SYSTEM.**

All water and oil cooling systems must be contained within the engine compartment Blisters and air scoops are not permitted.

## **19. FUEL SYSTEM.**

A maximum of a 4 gallon tank must be fitted behind the driver. The fuel outlet pipe must enter the tank at the top. A vent pipe must be fitted and either incorporate a one way valve or have a pipe attached terminating below the tank. An adequate firewall must exist between the tank and the driver. Fuel lines must be metal and a fuel tap must be fitted within easy reach of the driver.

## **19A. FUEL**

### **FUEL SPECIFICATIONS – ALL OVAL RACING FORMULAE**

Permitted fuel specification from 1<sup>st</sup> January 2008 (this specification supersedes all previous specs).

1. All cars must only use fuel from roadside pumps as defined below.

Petrol (Motor Gasoline of the type on sale to the general public from roadside filling stations) BS 4040 (Leaded) Subject to a valid permit for use. LRG (Unleaded), BS EN 228 (Unleaded), BS7800 (Super Unleaded).

2. Petrol is a product refined from crude oil that contains a large number of identifiable compounds that can typically be 250 in number. These compounds can be identified and compared to the available petrol from major oil companies and suppliers.

3. Unless otherwise stated, or the distinction is made between leaded and unleaded petrol, major gasoline fuel shall meet the following; Acceptance levels for Octane numbers will be determined at 95% confidence level.

Only

additives to this motor gasoline fuel solely for the purpose of lead replacement are allowed.

4. Lead Replacement Gasoline, LRG, also known as LRP. Only additives from Sodium, Phosphorous, Potassium, or

Manganese according to manufacturers recommendations are allowed. Note; Manganese can enhance octane values in any petrol. Under no circumstances will values in excess of 0.005 grams/litre be permitted.

**Lead in excess of EU directive 98/70EC requirements is illegal.**

5. We reserve the right to amend the detail of the above specification to reflect any change occurring in the quality of

the fuel on sale to the general public at any time.

### **Roadside fuel consistency when testing fuel samples.**

**BS EN 228 BS 7800 BS 4040 LRG/LRP** Test Standard

Motor Oct No (max) 89.0 89.0 89.0 89.0 ASTM D2700/86

Mon (min) 85.0 86.0 86.0 86.0 ASTM D2700/86

Research Oct No (max) 100.0 100.0 100.0 100.0 ASTM D2699/86

Ron (min) 95.0 97.0 97.0 97.0 ASTM D2699/86

Lead (max) 0.005 0.005 0.15 ASTM D3341 / IP362

Lead (min) ASTM D3237 ASTM D3237 0.005 ASTM D3237 / D3341 / IP362

Density @ 15° 0.720 - 0.775 0.720 - 0.775 0.720 - 0.775 0.720 - 0.775 ASTM D1298/ D4052

Oxygen % max 2.7% w/w 2.7% w/w 2.7% w/w 2.7% w/w Elemental

Nitrogen % max 0.1% w/w 0.1% w/w 0.1% w/w 0.1% w/w ASTM D4629/ IP379

Benzene % max 1.0% v/v 1.0% v/v 1.0% v/v 1.0% v/v EN238

Sulphur 150mg/kg 150mg/kg 150mg/kg 150mg/kg EN ISO 14596 / ASTM D2622

Olefins\* 18% v/v 18% v/v 18% v/v 18% v/v ASTM D1319

Aromatics\* 42% v/v 42% v/v 42% v/v 42% v/v ASTM D1319

\* Olefins and Aromatics values are expressed as a percentage of total fuel.

## **20. ELECTRICAL SYSTEM.**

Batteries must be bolted or clamped in position and completely covered with a rot proof material to prevent acid leakage. All wiring must be fully insulated. Electric starters must be fitted and in working order. Brake lights must be fitted on the rear panel shelf or hung from the roof and totally inside the car. Cars without working brake lights will be excluded from the meeting. Electronic ignition is permitted. An electrical cut out switch must be fitted to the rear near side corner of the car and clearly marked ON\OFF.

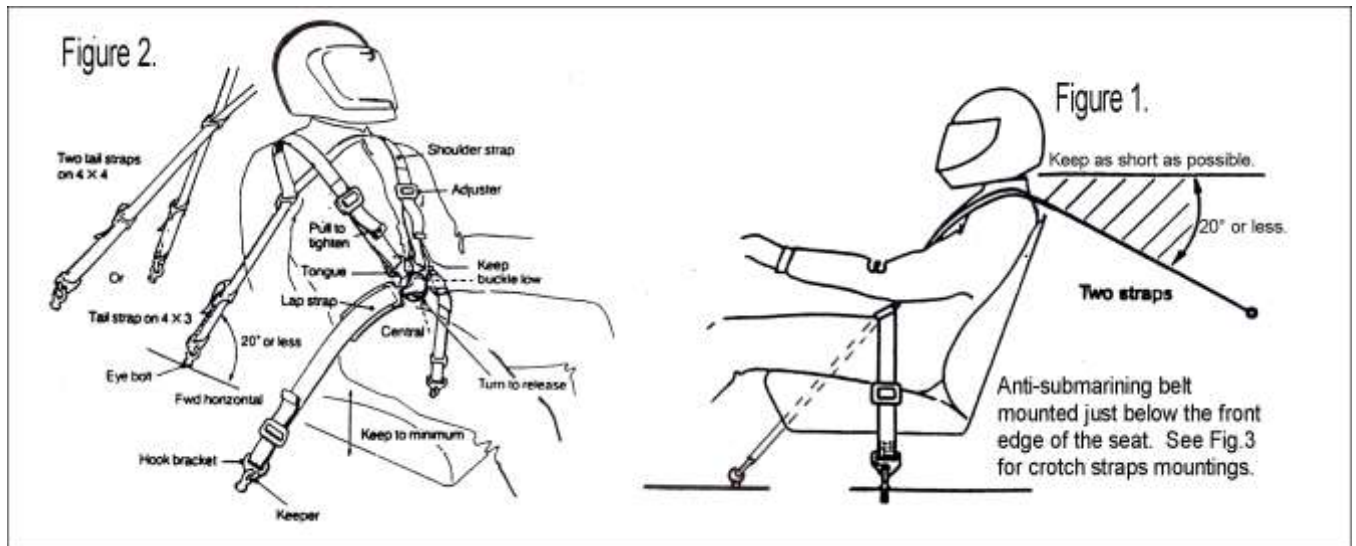
## **21. SAFETY EQUIPMENT**

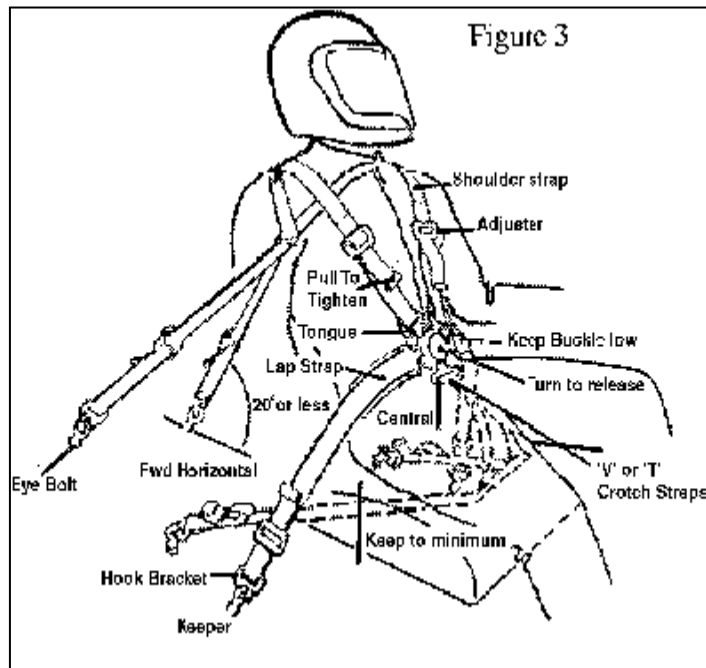
- ***Helmets must be of a minimum standard as directed by British Oval Racing Safety Executive (B.O.R.S.E). These are ~~BS6658 Type A/FR~~, FIA8860-2004, Snell SA2005, Snell SA2010, SFI Foundation 31.1A, SFI Foundation 31.2A. The E2205 European standard helmet may be used in Fibreglass, Carbon or Tri-Composite form only i.e. NO POLYCARBONATE helmets are allowed. It is important that the helmet fits the driver correctly. Shatterproof goggles/visors must be worn although tinted visors are not advisable. Your helmet must display the current ORCi (ORC10) sticker.***
- Neck braces are recommended.
- Fireproof balaclavas are **MANDATORY** and must be marked appropriately.
- Fire retardant gloves are **MANDATORY** and must be marked appropriately. Drivers must wear bright coloured racing overall type clothing of flame retardant Proban or a high specification material and this must be maintained in a clean and tidy condition in view of the public. N.B. If wet weather clothing is

used this must be worn IN ADDITION TO and NOT INSTEAD OF the regulation flame retardant overall type of clothing described above.

- A quick release cloth window net must be fitted to the driver's door window aperture. The netting should have holes not larger than 7.5cm or 3" wide. It should come down level with the steering wheel, and should be flexible and easily removable separate to the movement of the door.
- A 1Kg Dry Powder Gauge Fire Extinguisher is highly recommended and if fitted, this should be in a tube with a spring top and should be within easy reach of the driver. Old type BCF (green) type extinguishers are not allowed. All tow vehicles, must carry a minimum of a 2kg fire extinguisher dry powder or gas, which must be within easy reach of the driver and mechanics at all times, especially when refueling.
- A minimum of 3" (75mm) wide safety belts (1.75" (40mm) sub-strap) are mandatory. This must be a full five point buckle release harness (including NASCAR type) with sub-strap and must be fitted and bolted to the floor and/or the roll cage. Shoulder belts with a sternum protection latch are highly recommended. The sub-strap must be used at all times and all belts must connect to the quick release buckle. In the case of NASCAR lever latch buckles it is advisable to fit a secondary means of detent to prevent overall sleeves accidentally unhooking buckles during racing. A small section of Tubegrip elasticated bandage slid over the hooked buckle serves this purpose. Special attention must be paid to the condition of seat belts and fixings once fitted. An extra bar is to be fitted to roll cage behind drivers seat approx 4" below shoulder height of driver. Your seat belts may be fixed to this bar. The bar is to be of roll cage material specification.

Following recent research made by leading safety harness manufacturers, new information has been made available with regard to the best way to fit your safety harness, which will further ensure your safety. Please study the diagrams below to ensure your safety harness is fitted correctly.





Please note that all of the above rules are subject to change in respect of Health & Safety requirements.

## 22. DRIVERS SEAT.

A racing seat must be fitted and must incorporate a head restraint and should be bolted or welded to the floor.

## 23. FINAL PREPARATION.

The external painting of the car should be to a high professional standard preferably in bright colours. Any colour scheme is permitted and your name should appear on the sun visor. No childish drawings allowed. **Race damage should be repaired after each meeting and painted accordingly**

## 24. NUMBERS.

Your racing number should be painted on the doors and in a contrasting colour to your car, your number must also be painted white on black on the rear near side of your roof.

## 25. ROOF COLOURS.

The roof must be completely painted in your correct grade colour.

## 27. NOISE REDUCTION.

Exhaust systems are free but must be fitted and comply with the promotions requirements at all times. If a silencer becomes ineffective during racing or practice, the car will be withdrawn from the event. If exhaust systems pass through the car they must be covered.

## 28. NOTES.

No rear engine cars allowed. **The promotion reserves the right to exclude any car that it does not consider to comply within the spirit of the rules, if in doubt ask.** The Promotion also reserves the right to exclude any car that it sees as scruffy or unsightly and detrimental to the Formula.

## 29. TRANSPONDERS

**Transponders are mandatory and should be working at all times. They should be fitted 1.8 metres back from the front most position of the car. A hole of at least 6" (150mm) is required in the floor, with the transponder fitted vertically, just below the hole. In the event of a dispute with the transponder result, the Steward of the meeting will make the final decision. Any driver found to have fitted the transponder further forward that the required 1.8 metres will be excluded from the meeting.**

## The Race

### GENERAL

The following rules will apply to all formulas that race at ORCi Sanctioned Tracks. Any variation to these rules must be agreed with the Oval Racing Council, and then, only in exceptional circumstances. Reference will be made in these rules to three types of racing. 1. **Non Contact** (Hot Rods, Stock Rods, Legends etc). 2. **Contact** (Stock Cars, Super Stox, Rebels etc). **Full Contact** (Bangers, Bombers etc).

### STARTING POSITIONS

Drivers must start in positions laid down by the Steward and in their correct grade (where applicable) at all times. Special dispensation to start at the rear of the grid will be made, only on application to the steward, in the case of a driver wishing to test a new car on the occasion of its first meeting or at the stewards discretion.

All race winners (where applicable) must start at the back of their grade for each subsequent race in any meeting. The onus is on the driver to take up this grid position and two places will be docked by the steward for each position out of the correct starting order, occupied at the start of the race. Championships with specific race formats will supersede this rule.

### CLUTCH STARTS

At all clutch starts the Starter shall satisfy himself that all drivers are ready on the yellow flag and are in a position where they can see the start signal before dropping the green flag.

Any driver moving before the green drops will be liable to immediate exclusion.

### ROLLING STARTS

In the case of a rolling start the drivers shall drive a preliminary lap, or part lap as directed by the Steward, keeping abreast in their proper positions and at a speed set by the inside driver at the front of each grade who shall maintain the allotted gap between grades. The race shall be started by the Starter causing the starting flag to be dropped at any time after the leading cars have passed the third bend.

All drivers must keep rank, and must wait for the starting flag before commencing racing.

No car must accelerate beyond rolling lap speed until the Starter has shown the starting flag.

Any car unable to maintain the pace lap order due to clutch problems must start between the leader and the last car in order to avoid upsetting the start / restart.

Prior to the start, or re-start, a driver being too far in front or reducing speed on approaching the starting line, may be excluded or docked places at the discretion of the Steward.

### START AND FINISH POINTS

The start and finish of a race or an attempt at a record shall occur when any part of the car passes over the starting or finishing line. In the event of a blocked track, the finishing line shall be deemed to extend a reasonable distance in to the infield. In formulas where transponders are used, the Steward's decision is final.

### RACE PROCEDURE and DISCIPLINE

No work may be carried out on any car at any time on the race circuit without the permission of the clerk of the course. If a driver wishes to carry out work on a race car and that work can be completed within the regulations specified in these rules, the car must first be removed to a safe area within the arena.

The driver must not under any circumstances, leave the confines of the race circuit during a race to perform this work.

After the first green flag of any race has been displayed, any car, having entered that race or any restart thereof, cannot receive attention from anyone other than the driver and then only when this can be achieved without assistance, i.e. the handing of tools or parts over the safety fence / the carriage of spare parts or tools within the race car / the use of implements from within the arena whether they be part of another car or stadium items is forbidden. It is not permitted to transfer parts from a disabled car within the arena. In the event of cars becoming entangled, the track staff are permitted to disentangle them and permit them to rejoin at the discretion of the steward on the rear of the re-formed grid.

In addition, cars being push started will not be deemed as outside assistance.

The primary cause(s) of the suspension/stoppage, shall be excluded.

Drivers who use their car to shield and protect an upturned or damaged car, will not be excluded when the race resumes at the discretion of the Steward.

**Please note that the above Race Procedures may be varied via Supplementary Championship Regulations. These are only applicable to the following Championship races: World, British & European. The Supplementary Championship Regulations must be submitted to the ORCi Secretary at least 14 days prior to the event and will be published on the ORCi Website and any formula specific websites. The regulations must also be circulated in writing to all competitors within the event.**

### SIGNALS.

The GREEN LIGHTS and GREEN FLAG indicate the start of the race and the green lights shall remain on for the duration of the race.

The YELLOW LIGHTS and YELLOW FLAG indicate danger as described below.

The starter, Steward and Flag Marshals shall apply the following rules to the use of lights and flags during racing :–

(a) During the rolling lap the lights will show yellow and the Starter will show a yellow flag (covering the green flag).

The starter will begin the race by showing the GREEN FLAG and immediately the GREEN LIGHTS will replace the yellow lights.

(b) Waved yellow flag and flashing yellow lights, i.e. Race Suspension:

A Flag Marshall, wishing to inform the Starter or Steward of a serious incident, or the presence of hazardous objects or material on the track shall do so by holding an indicator board or a yellow flag, 'open', above his head, whereupon the Steward may introduce Race Suspension. Co-ordination between Steward, Starter and marshals in these circumstances is critical. This may also be done by radio.

In the event of a major incident (which includes a car rolling onto its side or roof on the track and in the line of racing) or where loose objects or material on the track may constitute a hazard to spectators, competitors or officials, the Steward may bring the whole circuit under RACE SUSPENSION conditions, without the race being stopped (red flagged) by introducing waved yellow flags and flashing yellow lights. In the event of a wheel becoming detached from a car, immediate race suspension will be invoked. On introduction of race suspension ALL CARS MUST SLOW TO ROLLING LAP SPEED (or stop where the lead car is so instructed) and get into Indian File. THERE WILL BE NO OVERTAKING.

The single file grid may continue to circulate AT WALKING PACE (some circuits will implement the use of a Pace Car to control this speed). In some circumstances it may be necessary to bring the single file grid to a temporary halt under a race suspension (for example, to ease the movement of recovery/rescue vehicles). Such a temporary halt does not constitute a Red Flag Stoppage. Any driver unlapping himself, or breaking rank from the single file, without authorisation, will be immediately excluded from the restart of the race.

In this situation, drivers are not permitted to leave the seat of their cars or have anyone touch their car. It is essential that drivers are aware and make their mechanics aware that they are liable to exclusion should their mechanics enter the arena at this time whether or not they receive assistance. Cars must restart in the same condition as before the Race Suspension.

In preparation for the restart, cars will be lined up in the order prevailing prior to the introduction of race suspension (yellow flags), lap down cars must remain in the position they occupied on the track at that time (not in positional order, see 10b). The steward is empowered to re-instate any driver being in his opinion, accidentally taken out of the race during a race suspension.

During a rolling Race Suspension, manual lap scoring is suspended, and electronic lap scoring will utilise the 'non-counting' yellow flag system, to ensure that the appropriate number of racing laps are raced.

The race can only be restarted by the Starter showing the green flag to the Race Leader and simultaneously green lights will replace the yellow lights. The green flag will be withdrawn after all cars have passed the Starter.

The RED LIGHTS and RED FLAG are used to denote that the race has been stopped. All drivers must, with care, slow down immediately and STOP as soon as possible. Cars will then remain stationary until the Clerk of the Course gives instruction to reform on the grid or leave the track, (see rule 10 stoppages).

The BLACK FLAG is shown to a car that has been disqualified and which must retire from racing immediately.

The BLUE FLAG indicates to a driver that there is a much faster car behind that is about to overtake. Non Contact Formulas only.

The WHITE FLAG WITH A RED CROSS (X) is a TECHNICAL DISQUALIFICATION FLAG. This is used to signal to a driver that they have a problem with their car and must immediately retire to the infield.

The WHITE FLAG WITH BLUE SPOT. Used to warn drivers that there is oil or debris on the track. However racing may continue. Contact & Non Contact Formulas only.

The CHEQUERED FLAG indicates completion of the required number of laps. It will be the intention for all races to be run to their full published distance, wherever possible. The Chequered Flag shall be waved at the first driver to complete the race distance and held out until all points places have completed the race distance. Drivers having received the Chequered Flag must continue at race speed until all places have been filled and the red flag is displayed. Race conditions and rules apply until the red flag which, when waved together with the chequered flag and red lights, denotes the end of the race. All cars to slow down and proceed to the exit gates. Any offense committed on track after this time will render the driver liable to suspension.

A LAP BOARD indicating the number of laps remaining to be completed must be displayed by the Starter over a minimum of the last three laps.

## **STOPPAGES (Red Flag)**

A race may only be stopped on instruction from the Steward, in the interests of safety or other contributory factors (Time Limit) etc.

The race may be stopped if the pits gate has to be opened to facilitate entry to the track of either an ambulance or breakdown vehicle, although this can also be done under a yellow flag at the Steward's discretion.

- (a) In the event of any car in a stopped race having completed more than 3/4 of the total distance, the race shall be deemed ended and positions awarded according to the last fully completed lap of each car. The car(s) causing the race to be stopped cannot be included in the result.
- (b) In any stopped race where no car has completed 3/4 of the total distance, the race shall be restarted and run over the balance of laps outstanding to the leading car.  
The cars shall be restarted in single file, rolling start, in the positional order and on the same lap as they were at the time of the stoppage. Positional order shall mean 1st 2nd 3rd 4th etc. Cars one or more laps down will continue the single file grid after the lead lap cars and will restart with these laps to make up on the lead car.
- (c) In the event of no cars having completed more than 3 laps of the total distance, the race shall be re-run. Note that a temporary halt under yellow flags (caution), is not the same as a stoppage under red flags.
- (d) The only cars permitted to take part in any re-run shall be those having taken part in any/all other restart(s) immediately prior to the stoppage. A car missing taking part in a restart shall not be eligible to compete in any subsequent restart of the same race.
- (e) A driver is permitted to leave his car during a red flag period but any work performed must comply with the foregoing regulations.

## **DISQUALIFICATION and PENALTIES**

Drivers will be penalised (and may be disqualified) for unnecessarily cutting across the infield or for gaining advantage by leaving the track to pass an opponent. A penalty will be imposed for :-

- (a) Unnecessarily cutting across the infield.
- (b) Gaining advantage by leaving the track to pass an opponent. This will include the illegal use of kerbs.
- (c) Breaking the rolling lap to gain advantage either by gaining places or by deliberately holding up the start.
- (d) Leading a Race Suspension at too fast a speed.

If a driver is penalised for more than one incident during a race or a meeting, the Steward may, at their discretion, disqualify the driver from the rest of the meeting and/or report the driver to the Board of Control.

The offending driver may be fined or suspended from driving at future meetings, the amount and period to be decided by the appropriate Board of Control.

A car being overtaken on the inside may not turn into the overtaking car. Also Side Swiping is not permitted i.e. a driver being overtaken on the straight may not turn into the overtaking car. NB. This does not apply to FULL CONTACT Racing. A driver losing a wheel or suffering a flat tyre may be flagged off at the discretion of the Clerk of the Course, having due regard to preservation of the track surface, and the number of laps still to run.

## **FENCING**

A car shall be deemed to be deliberately 'fenced' when the other car (or cars) has turned into the fenced car from the outside providing other reasonable action was possible.

Any car going into the fence as a result of a spin shall not be deemed to have been deliberately 'fenced'.

Any car pushed from the rear in the general direction of racing shall not be deemed deliberately 'fenced'.

A car pushed at (in the opinion of the Steward) unreasonable speed from the rear into a bend shall be deemed to have been deliberately 'fenced'. The fencing of a car is against the rules of racing in all formulas with the exception of FULL CONTACT Racing. Offenders will be penalised by the Steward of the Meeting who may also refer the incident to the relevant Board of Control.

## **END OF RACE**

A race shall be deemed ended when the cars for paid and/or points places in the race have completed the race distance.

## **INTERPRETATION OF RULES**

Decisions of Officials on interpretation of the rules pertaining to race procedures or lap scoring positions, shall be considered Final. At all times, while on the track, a driver shall be deemed to be under Racing Rules.

## **CONDUCT**

Any driver guilty of any act prejudicial to the sport shall be reported to the appropriate Board of Control or Formula Organiser, for disciplinary action, and may be called upon to appear before the Board or Organiser to answer the charges.

## **AGE LIMITS**

### **Junior Formulas**

In Junior Formulas the upper and lower age limits are set by the organising Promoter or Association. i.e. In ORCi Mini Stox the lower age limit is 11 years and drivers must leave the formula prior to their 16th Birthday.

Other Junior formulas may have other upper and lower age limits determined by the organising ORCi Promoter or Association.

NB. All drivers under the age of 18 years must have their License Application guaranteed by the parent or legal guardian - proof of guardianship may be required.

### **Senior Formulas - Lower age limit**

All competitors in a Senior Formula must complete a Medical Self Declaration which is included in their License Application Form.

In all Senior Formulas the minimum age for competitors is set at 16 years. No competitor may participate in a Senior Formula prior to their 16th birthday.

For BriSCA F1 Applications, drivers aged 16-17 are required to provide evidence that they have competed in an approved formula and achieved a high level of competence.

NB. All drivers under the age of 18 years must have their License Application guaranteed by the parent or legal guardian - proof of guardianship may be required.

### **Senior Formulas - Upper age limit**

All competitors in a Senior Formula must complete a Medical Self Declaration which is included in their License Application Form.

Drivers who reach the age of 55 may, in certain formula, be asked to pass a Medical Examination by their General Practitioner (GP) before applying for their License. Subsequent annual License applications do not require these Medical Examinations up to the age of 65 unless specifically requested by the ORCi.

All ORCi sanctioned Senior Formulas require drivers to pass a Medical Examination when applying for their License at the age of 65 years and over on an annual basis.

Any fees due for these Medical Examinations must be paid by the applying driver.

The Medical Examination should be carried out to a standard similar to that required for Life Insurance.

Competitors holding a current HGV license may use this as proof of Medical Condition.

Applications for a License by competitors over 55 years of age who have not held a license in the previous 5 years in the same or similar formula would not normally be granted.

In all cases the ultimate decision as to whether a driver is fit to hold a Competition License resides with the ORCi Promoter or Association.

## **SAFETY**

It is an offense for a driver to push, or work on his car within the arena while a race is in progress. Drivers abandoning cars during a race, must either retire to the central safety compound or to a safe distance behind the safety barrier. It is the drivers responsibility to ensure that current health and safety legislation is adhered to when in the pits area. Special attention should be given to the Risk Assessments produced by the promoting company of each track.

## **PAYMENT & POINTS**

Points are awarded as follows;

Heats, Finals & Allcomers Races score 10 9 8 7 6 5 4 3 2 1

Destruction Derby Winners & Last Car Running Winners will receive 5 points each.

Payouts are as follows;

Heats £25 £10 £5

Finals £50 £25 £15 £10



OVAL RACING COUNCIL INTERNATIONAL

## **Competitor Health & Safety Guidance at Race Events**

The ORC is the governing body of British Oval Racing and sanctions all official UK tracks.

Oval Racing is the most exciting motorsport around, and as with all motorsport it is important that Health and Safety issues are dealt with, so that we can go and enjoy the sport in safety.

It's vital that you understand the Health and Safety requirements at an Oval Race meeting, for your own sake as well as those around you.

This leaflet will take you through many of the important Health and Safety Issues associated with our sport.

### **ARRIVE ON TIME**

To enjoy a good day of racing, you need to arrive in plenty of time. Set off early, in order to get to the track with sufficient time to park up, unload, and go through scrutineering.

Pre-meeting preparations should never be rushed. Make sure you and your pit crew are at the top of your game! Don't come racing after a big night out, or if you're tired. If you or your crew are not up to it, others may get hurt.

The start of the day is a very busy time at a race track. Different tracks run their pit parking in different ways. Some have designated areas for particular formulas, others work on a first come first served basis. Everyone is working to ensure that drivers get parked up efficiently and safely. You need to help with this. Follow all Pit Marshal's instructions, and be very aware of pedestrians and other vehicles. Children should be supervised at all times and dogs must be kept on leads. No smoking is allowed in the Pit areas or any part of the Track.

When reversing always ensure that a member of your crew or a Pit Marshal is watching the rear of your vehicle – to make sure that you are reversing safely. Always obey the 5 mph limit in the pit area.

When unloading your car, you must ensure that there are no safety implications for your crew or members of the public. It is your responsibility to ensure that your actions do not impact on the Health and Safety of others.

### **SIGNING IN**

At all Raceways, you must sign a disclaimer before racing – make sure you do this soon after you arrive and make sure you take your Log Book with you.

### **KEY PERSONNEL**

There are two key personnel at every raceway, concerned with the safe running of an event. You need to know their titles and be aware of their roles.

***The Steward of the Meeting*** is generally found in Race Control, and has overall responsibility for the safe-running of an event. The Steward acts as "referee" on the racing, calls for flags to be displayed, and has overall responsibility for the racing related Health and Safety at an event.

Decisions made by the Steward might involve you, and sometimes might be hard to understand as you may not have the benefit of an overview of the Health and Safety status of the event as a whole. You must follow directions given by the Steward, usually via flags, immediately, in order not to compromise your own or others, safety.

**The Clerk of the Course** is usually found on the Raceway Infield. The Clerk controls the race marshals, and is in overall charge in the event of a racing incident, such as a crash. The Clerk is in constant contact with the Race Steward and has a key role in Health and Safety at an event both on the track and in the pits.

Clerks are highly trained and experienced, and it's vital that you obey any instructions delivered directly from them or via a Race Marshal, immediately and without question.

### **SCRUTINEERING**

Full details regarding construction rules will have been sent to you when you registered with your ORCi Promoter or Formula Association. It is your responsibility to build your car to the letter of these rules and to present it in a fully legal and safe state.

Scrutineering takes place before the start of an event, either where you're parked in the pits or at a designated scrutineering bay. You should present your car as early as possible – so that in the event that there is an issue with your vehicle, you will have a chance to make changes and re-present your car.

If driving to scrutineering please follow the 5 mph rule.

Scrutineers look at both the Technical compliance of the car and at the safety features. Their role is to inspect, as far as is reasonably practicable, the general compliance of your car. However, the responsibility for both Safety and Technical compliance remains yours.

During the meeting, you must ensure that you maintain an effective Health and Safety regime. All work on your car must be carried out safely. Pay particular attention to items such as fully tightening wheel nuts when replacing wheels, carefully securing bonnets after removal and repairs to critical parts like brakes and steering. Scrutineering in no way removes the responsibility of building a full legal and safe car from you, and if in doubt you should contact your promoter/formula organiser or the ORCi, and not race your car until you are certain.

Attempting to hide illegal items on your car will incur severe disciplinary action - this could be dangerous to you and others on the track.

ORCi tracks operate a zero tolerance to abusive behaviour towards members of staff, and this is particularly relevant at scrutineering. Scrutineers have a vital role in ensuring racing is safe and fair, and must be allowed to perform this job without hindrance.

### **PIT SAFETY**

There is a good record of Pit Safety at UK Oval tracks. You have a role to play in ensuring that this remains the case. When working on your car in the Pits you should be aware at all times that members of the public may be in the pit area, as well as other competitors, mechanics and members of their families. You should make sure that a member of your crew is responsible for ensuring no-one is placed in danger by your work. Members of the public should be at least 2 metres away when carrying out any mechanical work.

Normal Health and Safety rules apply within the Pit area. This particularly applies when mechanical equipment is being used like hiabs, stihl saws and welding equipment. You must ensure that the people who are operating this equipment are fully qualified to do so and have the appropriate personal protective equipment such as goggles and footwear. The actions of your crew remain your responsibility throughout the Raceday.

Fuel should be stored in approved containers and well away from public areas. When re-fueling your vehicle, a second person must be present with a fire extinguisher. Extra care should be taken if the engine is still hot. Members of the public should be at least 2 metres back when re-fueling.

Please remember that it is an ORCi rule in all formulas that a fully operational Fire Extinguisher is kept with all tow vehicles and its position is known to all your pit crew.

When driving in the pits you must always obey the 5 mph limit. No smoking is allowed in the Pit areas or any part of the Track.

### **PERSONAL SAFETY EQUIPMENT**

As well as racing a well built and fully legal car, you need the right protective gear to keep safe. It is your responsibility to ensure that you are wearing appropriate safety equipment when entering the racing arena. Your race suit must be fire retardant (Proban or better). Your Helmet must comply to the latest ORCi standards, and

have the chin strap fully secured before entering the race arena. Waterproofs and gloves must also be fire retardant. Labels must be present on all these items, as evidence of their specification.

For most formulas, a full race harness is required, 5 point or better. These must be fully tightened before entering the racing arena. All damaged safety items must be discarded. The Clerk of the Course reserves the right to confiscate any item deemed to be unfit, for the duration of the event.

Oval Racing has achieved a good record of safety, and there is a good level of medical cover at all ORCi officially sanctioned events. Safety provision typically includes a medical centre, fully staffed ambulances, a paramedic or doctor.

## **THE RACE**

Most races start with a rolling start. A pace car is sometimes used. During the rolling lap you must hold formation and not overtake other cars.

During a race, the Steward of the Meeting will use a variety of Flags and Signals to communicate with you. The Starter is the primary flagman. You must try to look at the starter on every lap, keeping you informed about the status of the race. There are also Marshals located around the Raceway, who display flags as necessary. It is important that you understand these flags, and know how to respond to them.

Flags/Lights that are relevant to health and safety include:

Green means "Go": it is important that you don't Jump the green at the start of the Race

Yellow (Stationary) warns that something is not ideal on the raceway, for example a car has spun out, but the race is continuing.

Yellow (Waved) means race is under Caution: slow down to walking pace, fall into single file when safe to do so, (no overtaking). A Pace car may be used. Follow marshals instructions. Be aware of marshals, tractors and medics on the track.

Red means stop: as quickly, but primarily AS SAFELY, as you can. In extremely dangerous situations a full race stoppage will be called straightaway. In this case you should immediately slow, and stop your vehicle as safely as possible. You should then follow the marshals instructions. This flag is more commonly used in full contact (Banger) racing.

The red flag is also used to signal the end of the race following the chequered flag.

Black means you must leave the race track, onto the Infield, quickly and safely

Red Cross means there is a technical issue with your car, leave the raceway immediately and safely.

## **FREQUENTLY ASKED QUESTIONS**

### ***What should I do if I am stationary on track during a race?***

Firstly, look out for a marshal and signal that you are not injured with a "thumbs up". If you are injured and need assistance give the thumbs down signal, if possible. If eye contact is made with the marshal, and no signal is given, then the marshal will assume that you're injured and this information will be relayed to race control.

Don't give a thumbs down signal if you are not injured but feel that you're in a dangerous situation - this decision will be taken by the Steward in Race Control.

Any driver who is the cause of a caution or stoppage through injury or suspected injury can't take part in the remainder of the meeting and must be passed fit to drive by a doctor or paramedic before competing at subsequent meetings.

During a race, you shouldn't exit your car whilst on track, unless you feel it's absolutely safe to do so, or you are in extreme danger within the car, for example in the case of fire.

Generally, keep your harness and helmet on, until the end of the race or until the race is cautioned or stopped.

### ***What should I do if I need to stop my car because of mechanical failure during a race?***

Retire to the Infield as soon and as safely as possible. If safe to do so, leave your car keeping your helmet on and go to a safe area as indicated by the marshals. If you do exit your car, never stay with the car once you've got out of it. If you are racing at an unfamiliar track it is important that you find out where the designated Infield safe areas are prior to racing.

### **END OF RACE**

At the end of a race, it's important that you continue to race after the chequered flag has been shown. It's only when the Red Flag is shown that you should safely stop and follow marshals instructions.

When going back into the pits you should take extra care as there'll be marshals and members of the public in the pit area. If your car has been damaged during racing, and you're not able to drive with the car fully under control, you should stand at the front of your car and wait for a breakdown vehicle to take you into the Pits.

### **FIRE**

The hazard of fire is a very real one at Oval race meetings. This problem can happen at any time on track or in the pits. Fire Marshals are fully trained to deal with fires in the racing area. There are extinguishers positioned around the track and on the Infield. In the pits area there is a fire point and a marshal who is trained.

However, because of the size of the pits area all drivers are required to have a fully operational fire extinguisher with their tow vehicle. It must be easily accessible and regularly checked and refilled if necessary. You must make all your race crew aware of the position of this extinguisher in case of an emergency.

*Please remember* special care should be taken when re-fueling. In all instances, a second person, with an extinguisher, should stand next to you when you are carrying out the re-fueling.

The pits are a non smoking area.

### **ALCOHOLIC DRINKS**

It goes without saying that racing and alcohol do not mix. The ORCi has a zero tolerance to alcohol consumption by drivers, crew or staff before or during a race event. It's also an offense to take alcohol into a sports stadium.

The dangers of consuming alcohol are obvious, not only for the person concerned but also other drivers, pit crews, officials and members of the public.

### **LEAVING THE STADIUM**

At the end of the day, it's important that you leave the stadium carefully. This is a time when accidents can happen, with drivers tired after a big day of racing, and eager to get home. Loading the trailer at the end of the day must be done carefully. The car may be damaged, you and your crew may be tired and there may be spectators around. Therefore, special care should be taken when exiting the pits area especially at night when visibility may be restricted.

### **SUMMARY**

Whilst all motorsport is dangerous, Oval racing has a good history of safe operation over 100s of 1000s of laps and more than 50 years of fantastic racing. You need to play your part to ensure that you, your family and those around you are not endangered by your actions at race events.

The ORC is dedicated to the future of Oval racing, and a vital part of this is to ensure that the excellent safety record of the sport continues.

*If you require additional information regarding Health & Safety issues go to the ORCi website at [www.orci.co.uk](http://www.orci.co.uk)*

**Have a great season of exciting and safe racing!**

