

Ballymena Raceway

2018 Street-Rods SPECIFICATIONS

ST Rods



INTRODUCTION

The Street-Rods FORMULA is NON-CONTACT and cars should be prepared with a professional racing appearance. This standard is required to be kept up throughout the driver's racing season. Cars with tatty, dented and badly battered panels will not be passed by the Scrutineer. (Metal panels only may be used with the exception of front and rear bumpers and these must originate from the make and particular Model of car being used). Cars which had plastic panels as standard (i.e. wings) are eligible.

VIOLATIONS

When referring to the engine, gearbox, differential, mechanical or construction, rules and regulations, the principle will always be: - UNLESS PERMISSION IS SPECIFICALLY GRANTED TO MAKE MODIFICATIONS OR ANY VARIATION, NOTHING MAY BE DONE TO ALTER OR CHANGE IN ANY WAY THE STANDARD PARTS. 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.

Cars, engines etc. will be checked on a random basis and the promotion will exercise its judgement which will be final in every case. If parts are suspected as being illegal, make sure you leave them with the promotion if you do not agree. If you remove any parts that are in dispute from the stadium, without the consent of the scrutineer/promotion they will automatically be deemed illegal.

If any car is found with an illegal Engine/Tyres/Suspension, the driver concerned will lose all points gained for the season with a minimum 4 meeting ban being put in place.

The Promotion reserves the right to purchase a full car for up to a maximum of £650 or complete Engine including Carburettor or Injection system, Inlet Manifold and ECU System for £75.

1. DRIVERS

NO COMPETITOR UNDER THE AGE OF 16 WILL BE ALLOWED TO RACE.

2. CARS

All cars must be presented for scrutineering before being permitted out on track to Practice or Race at all Raceway meetings.

The only cars eligible for use are those listed at the end of these Specifications
Cars must be painted in bright colours.

3. ENGINE

The only engines permitted for use in Street-Rod class are the 1.1i 8v, 1.2 8v, 1.2i 8v, 1.2i 12v & 1.2i 16v.

(see list of eligible cars for use on the last page of Spec.)

IF THE CAR RUNS AN ECU IT MUST REMAIN STANDARD AND UNWORKED.

NO race engines. Engine Identification marks must be clearly visible to scrutineers.
Cars that are thought to be too quick in view of the Promotion will be checked regularly.

The Engine must remain in its standard form.
No special Cams, Springs, Lightening/Balancing of parts or changing any engine components.

All parts to engines must be original and completely standard.

The only modifications that can be done are the ones that are stated.

**It is permissible to have the CYLINDER HEAD SKIMMED by a MAXIMUM OF 20 THOU.
NO LIGHTENED FLYWHEELS.**

4. CARBURETTOR

Must be the item originally fitted to the engine and the casting must not be altered in anyway.
Jets may be changed, although no reprofiling or enlargement of air or fuel galleries allowed.
Floats must not be modified.

The only engine permitted to use a Carburettor is the 8v Vauxhall.

5. ECU & INJECTION SYSTEM

The standard ECU must be used and unworked.
The fuel injection system must remain standard with no modifications permitted.

6. EXHAUST & INLET

Manifold and downpipes must be standard and be fitted with a silencer.
Silencer baffles must not be removed. The Promotion reserves the right to prevent any car from racing which in the opinion of the Scrutineer, is too noisy. Silencers must reduce the noise levels below 95 decibels at all times. Full length Exhaust system must remain in place.
NO BIG BORE EXHAUSTS PERMITTED.

7. TRANSMISSION

The Gearbox must take all gears as normal and the external casing must remain as standard. Mountings must also remain as standard.

Gear ratios and final drive are free but must remain standard to the manufacturer's range.

Driveshafts to remain within the Manufacturer's range.

The diff assembly must not be changed in any way i.e. limited slip diffs or welded diffs are not permitted.

The gearbox must be the standard one as produced by the manufacturer, but you may change the gear ratios by using transmissions from within the model range.

Note, you cannot modify a transmission or a component to make it fit.

8. WHEELS & TYRES

Wheel size – 13" and 14" wheels both permitted for use.

(Steel/Alloys wheels are permitted – max. width of alloy permitted is 6j)

PLEASE NOTE: Alloys must be of the original type fitted to that Make and Model of car.

Cars must not have say for example a 14" wheel on one side and 13" wheel on the other.

NO 15" Wheels permitted.

No Compomotive, Image or Competition type allowed.

Only conventional Road tyres permitted. No racing tyres, No mud & snow compounds, No Yokohamas, No Colway remoulds, NO 50 series profile tyres. Tyres must be of the same diameter size as original fitting. Tyre gaiters are not permitted. The cutting of tyres is not permitted. Any tyres with buffed markings will not be accepted.

The Promotion reserves the right to review the regulations relating to tyres at any time and to prohibit the use of any tyre not considered to be within the spirit of the regulations.

Maximum Tyre size car range from 145 to 185 with 55 to 70 Series only being permitted for use.

Example of tyres permitted for use:

Firestone Multi-Hawk

Silverstone Kruizer NS 800

Toyo Nano Energy 3.

Tyres price must not exceed £34.00.

The Promotion reserves the right to review the regulations relating to tyres at any-time and to prohibit the use of any tyre not considered to be within the spirit of the regulations.

No cutting or buffing of tyres is allowed. No competition tyres allowed.

Tyre Softener is not permitted. Dangerous Tyres are not allowed.

9. SUSPENSION

NO COMPETITON SHOCKS.

Gas Shocks are permitted but only if they were originally fitted to that particular make and model.

Negative camber on the near-side front wheel only is permitted. This may be achieved by modification of original standard parts only. Bottom arms may be extended and adjustable, locating holes on suspension components and top abutment plates may be elongated.

Shock Absorbers be exactly as per original. Strut platforms must not be moved or altered in anyway.

Rear Spring leaves can be flattened and rear coil springs can be cut and welded to enable suspension to be lowered, but the use of lowering blocks is not permitted.

Front coil springs may be cut for lowering purposes but must not be welded. All cars must retain the original diameter coil springs. No Diesel car suspension components to be used.

NO PROFESSIONALLY ADAPTED SPRINGS OR COIL SPRINGS TO BE USED.

Anti-Roll bars to remain standard to the car. **NO SPACERS or WASHERS PERMITTED.**

Back Axles must be standard to the vehicle.

All suspension parts must be located on the original mounting points on the chassis & body. Only standard bushes are permitted. Adjustable shock absorbers are not permitted.

10. WHEELBASE

The wheelbase on driver's side of the car must be standard with the passenger side allowed a max. of 2" lead being permitted.

11. BRAKES

To be as original and to work on all four wheels.

Handbrake is compulsory.

12. BODYWORK

To remain exactly as production, with the passenger door being tack welded i.e. 2" weld with a 6" gap before the next weld.

NO De-skinning of bonnet, boot, doors and quarter panels - OTHER THAN CUTTING A PORTION FROM FRONT DRIVER'S DOOR TO EXTEND CHICKEN BARS OUT.

Original front and rear Bumpers must be retained with all grilles in place.

3 x 2" holes may be cut in the front bumper were the number plate would have been mounted this is to help aid with cooling purposes.

Spoilers or aerofoils are permitted. No armouring is allowed.

Bonnets must be securely fixed front & back with some form of locking pins. (Two triangular gussets, 100x100mm or 4x4", may be welded at the bottom of the windscreen aperture to secure the bonnet corners).

Where headlamp apertures are filled, they must not have more than a 1" (25mm) overlap. Additional gussets must not be added to provide strength to chassis legs etc. Existing apertures, (headlamps etc.) may not be strengthened by any means other than you may pop-rievet a maximum of 18 SWG alloy plate as a blanking cover.

The Renault Clio Mk2 can run with plastic front wings.

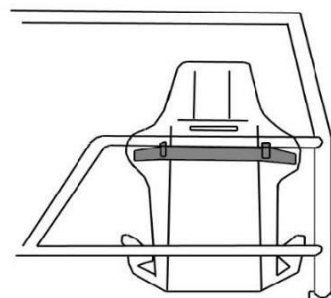
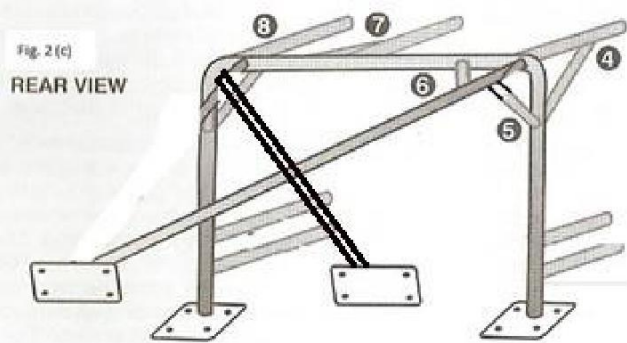
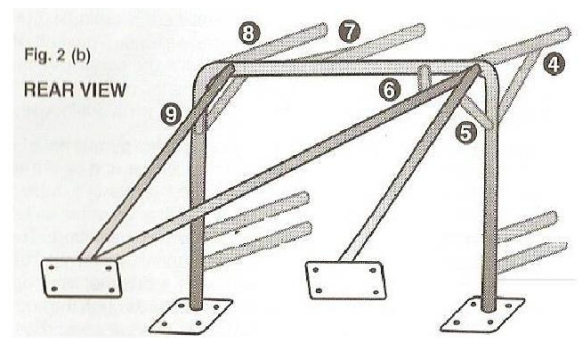
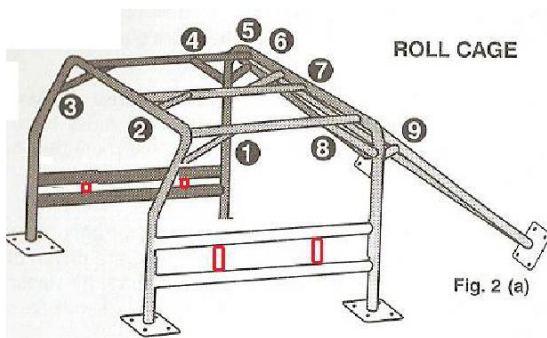
13. ROLL CAGES

No Alloy roll cage or part cages are allowed. The minimum steel roll cage protection you must have is one front hoop, one rear hoop, one rear hoop cross bar at shoulder height to mount seat support or a seat brace hoop as a seat support, three roof connecting bars, one dash cross bar, two D/S chicken bars plus two connecting bars, & two P/S chicken bars plus two connecting bars, & minimum 2 rear stay bars to the rear shock towers. The lower bar on the driver's side (if horizontal) should be a minimum of 3" (76mm) above the sill. The roll cage hoop feet must be on four welded 23cm square plate 3mm (min.) thick, or a piece of 38 x 38 mm box section, 2.5mm minimum thickness, connecting front and rear hoop feet welded to sill or floor. This bar will not be classed as a chicken bar. All joints must be welded over 90% of the joint unless as approved RACMSA cage is used. The cage must not protrude through the bulkhead with the following exception.

It is permitted to support both turrets from the roll cage with the maximum material and gauge as the roll cage, but the shock absorber must not connect to it. All bars connected to the cage must be steel. The minimum thickness of the roll cage are 1¼" OD 10swg (3mm) tube 1½" OD 12swg (2.5mm) tube 1½" x 1½" 10swg (3mm) box iron.

A roll cage bar must be fitted but must terminate at least 3" from the rear panel.

ROLL CAGE DIAGRAM



14. SCREENS

No glass is allowed in the window apertures. All glass must be removed, including headlights/sidelights and all rear lights, an internal mirror and external mirror are compulsory. A metal upright ¾" x ¾" must be welded or bolted into the centre of the windscreen aperture. A sun visor MUST BE FITTED across front windscreen. Wire mesh over the windscreen aperture is not permitted.

15. STOP LIGHTS

Two stop/brake lights must be fitted onto the rear parcel shelf or hung from the roof. Lamps must be operated by the standard stop light switch as fitted to that model of car. Bulbs to be of 21-watt intensity.

A strip light may be fitted instead of the above.

The Fiesta Mk6 & Vauxhall Corsa C can keep the original tail lights in place instead of any of the above.

Stop Lights/brake lights must be checked and working at all times.

16. BATTERIES & ELECTRICAL

Batteries must be securely clamped in place and covered with a leak proof material (such as rubber) to prevent spillage of acid. They must be fitted at least 6" away from the fuel tank.

NO PLASTIC BATTERY BOXES PERMITTED.

An electrical cut/off switch must be fitted to the R/N/S corner of the car.

The fuel pump cut/off switch must also be within easy reach of the Driver and Safety Marshals.

Alternators are optional. Fans belts must be in place. REV counters are not permitted.

17. SEATS

Competition seats are mandatory and must be securely fitted. The back of the seat must be adequately supported at shoulder height and a strong head restraint must be an integral part of the roll cage, if not part of the seat.

18. DASHBOARD & STEERING

Dashboard can remain in place with original key start.

All Airbags must be removed.

It is recommended that the upper retaining bracket of the column be strengthened for safety.

The use of quick release steering wheel mechanisms is permitted. The steering rack must occupy its original position, but the steering column height may be adjusted to suit the driver. It is recommended that the upper retaining bracket of the column be strengthened on some cars for safety. No quick racks or devices that act as a quick rack are allowed.

Polybush on rack mounting ONLY – rack mounting may be strengthened.

19. FUEL TANKS

The original Fuel tank can remain in place or replaced by a metal or FIA approved with a maximum capacity of 4 gallons or less are permitted. Suitable metal or braided fuel lines must be used between the fuel pump and the carburettor or injection system. Extra care must be taken on how to fit them correctly. A shut off tap must be fitted and kept within easy reach of the driver.

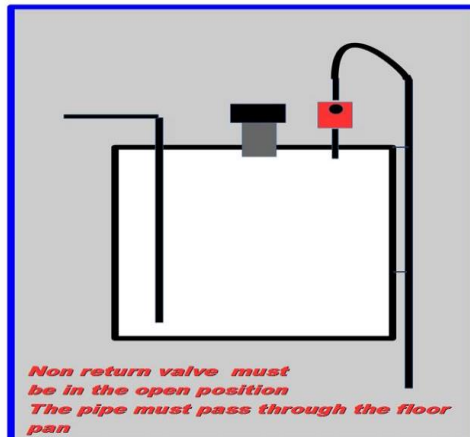
If installing the approved fuel tank it must be fitted rear of the driver but in front of the rear axle centre line and be securely mounted, they must also be 6" away from the battery, i.e. they are no longer allowed to be fitted in the boot area. All tanks must be fitted with a breather system which prevents spillage if the car overturns.

All petrol pick up pipes must draw through a stand pipe from the top of the fuel tank. Four 2" holes must be drilled at the lowest point under tanks to allow spilled petrol to drain. You may use an Electric pump.

A firewall between fuel tank including filler cap/pump and driver must be fitted.

A non-return valve to the tank must be fitted (see diagram below). The electrical isolation switch (cut off switch) must be fitted in the R/S/N window area, for easy access of Safety Marshals. All tank filler caps must be of secure leak proof metal with a screw fitting.

NON-RETURN VALVE MUST BE FITTED TO ALL CARS:



If using an electric fuel pump the cut-off switch must be positioned before the pump.

Drivers have the option to remove the original fuel tank on Injection cars and run a high line pressure pump but must fit all the safety features as mentioned above.

20. RADIATORS

Radiators are free and must be fitted forward of the engine.

21. NUMBERS

Must be displayed on both sides of the car in contrasting colours with a minimum of 12" high in 2" strokes. Numbers must be readable. Fin plates must be fitted in 9" high 1 ½ "strokes.

Numbers on both sides of doors must be of NASCAR Style.

Roof number fins can also be mounted as per the following diagram.

DOOR NUMBERING & ROOF FIN DIAGRAMS



22. ROOF COLOURS

When notified of your grading, driver will paint at least 90% of the roof to their appropriate grading colour. Race car numbers can be painted on the top of the roof, but will not be used as an excuse to have the incorrect roof grading. World Cup Champion, Irish Champion and Superstar grades can fit flashing orange lights to the front visor of the car.

If you win a race at a meeting; you will start the remaining races from the rear of your grade. should you win another race at the same meeting - you will be automatically upgraded.

GRADINGS

World Cup Champion – Gold with Flashing lights

Golden Helmet Champion - Red & White Chequered

Points Champion - Silver Stripe

Irish Champion - Green & White Chequered with Flashing lights

Superstar - Red & White Stripe with Flashing lights

Red, Blue, Yellow & White

23. SIGN WRITING

The drivers name must appear plainly on the sun visor. Only other writing confined to sponsors or mechanics names which must have the approval of the promotion at all times.

Cars must display the following words across the boot lid of car: 'ST Rod'.

24. SAFETY EQUIPMENT

General - All safety equipment specification rules apply to all competitors in all ORCi and ORCi affiliated formulas unless otherwise stated. All safety equipment must be worn/engaged at all times when on track during racing, practice or test sessions, and at ANY other time when moving at a speed greater than walking pace (4mph). Clothing that does not conform to the standards below may only be worn underneath the mandated safety equipment. For example, hooded tops must only be worn underneath a race suit/overall, and the hood MUST be tucked inside.

HELMETS & GOGGLES/VISORS

HELMETS- Helmets must be a minimum standard as directed by British Oval Racing Safety Executive (B.O.R.S.E).

A helmet conforming to at least one of the approved standards MUST be worn. 901.1.2 Helmets MUST meet or exceed the MINIMUM standard as directed by BORSE. The current approved standards permitted for all drivers are: • FIA 8860-2004 • FIA 8860-2010 • FIA 8859-2015 • Snell SA2005 (This standard will be reviewed at the end of the 2017 season) • Snell SA2010 • Snell SAH2010 • Snell SA2015 • Snell EA2016 • SFI Foundation 31.1A • SFI Foundation 31.2A • SFI Foundation 31.1 • ECE R22.05 (in Fibreglass, Carbon or Tri-Composite form ONLY)

The use of polycarbonate helmets is NOT permitted.

The helmet MUST fit the competitor correctly, according to the manufacturer's sizing/fitting guidelines.

All helmets MUST display the current "ORCi Approved" helmet sticker.

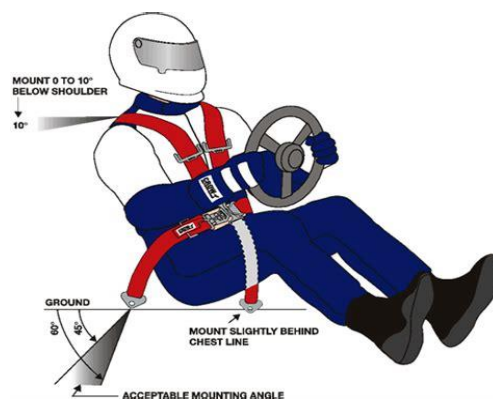
Goggles/Visors - Shatterproof goggles or a shatterproof visor MUST be worn with the helmet at all times. The use of tinted visors is NOT advisable.

SAFETY BELT AND EQUIPMENT

Usage - A full safety harness MUST be used in accordance with the specifications below. All mandated straps MUST be used at all times.

Type and Design - ALL formulas - the harness MUST comprise of a MINIMUM of 2 shoulder straps, 2 lap straps, and an anti-submarine strap (also referred to as a sub-strap, or crotch-strap) in a MINIMUM 5-point design. Shoulder straps with a sternum protection latch are highly recommended.

The harness MUST incorporate a quick-release buckle (including rotary buckles, and NASCAR lever-latch type buckles), to which all straps MUST be connected. Where a NASCAR lever-latch type buckle is used, it is advisable to fit a method of protection to prevent race-suit/overall sleeves from accidentally unhooking the buckle during racing. A small section of "Tube grip" elasticated bandage, slid over the hooked buckle is sufficient for this purpose.



Harness Strap Width - ALL Adult Formulas (competitors aged 16 and over)

All Non-FIA Approved Harnesses - The shoulder and lap/pelvic straps of ALL non-FIA-approved harnesses MUST measure at least a MINIMUM of 3in/75mm in width. This applies but is not limited to: • ALL non-homologated harnesses • ALL harnesses with NASCAR lever-latch type buckles • ALL harnesses homologated to SFI standards • ALL harnesses that do not meet ALL FIA criteria below - FIA Approved Harnesses – The use of narrower lap/pelvic straps is now permitted on FIA approved harnesses ONLY. The harness MUST meet ALL the following criteria:

- The harness MUST be certified/homologated to the current FIA standards: 8853/98 or 8853-2016

- The shoulder straps MUST measure at least a MINIMUM of 2.75in/70mm in width (unless used in conjunction with an FHR device – see below).
- The lap/pelvic straps MUST measure at least a MINIMUM of 2in/50mm in width.
- The FIA identification/homologation labels MUST be intact and visible to scrutineers on ALL sections of the harness.
- The harness MUST be within its visibly stated validity period.

ALL Harnesses - The anti-submarine strap MUST measure at least a MINIMUM of 1¾in /44mm in width on ALL harness.

ALL Harnesses - Where an FHR device is used by a competitor, it is permitted to use shoulder straps that narrow below the minimum specification (stated above) to ensure the correct fitment of the harness/FHR device combination. This exception applies to the shoulder straps ONLY.

Any such straps MUST be manufactured by a recognised industry supplier AND be specifically designed for use with an FHR device.

Installation - The harness MUST be securely mounted to the floor, roll-cage, and/or chassis of the race car. Harness manufacturers specify their own installation requirements depending on the design of their harnesses. Therefore, harnesses MUST be installed according to the manufacturer's recommended best practice using only approved mounting components/methods.

All the major manufacturers have installation information on their websites, and competitors are advised to refer to this when fitting harnesses to their race cars.

Useful websites include (addresses correct at time of publication):

Manufacturer's Websites • www.willans.com • www.schrothracing.com
• www.trs-motorsport.com • www.racequip.com

Safety Standards • www.sfifoundation.com • www.fia.com/homologations

Key general guidelines from manufacturers for the installation of harnesses state that: • Strap lengths should be kept as short as possible to avoid excessive stretching under impact. • Shoulder straps should be supported at or just below shoulder level. • Shoulder straps should be prevented from moving sideways, such that they may drop off a competitor's shoulders under severe impact/stretching. It is recommended that any seat apertures, through which the straps pass, are lined to prevent chaffing of the straps.

Condition and Maintenance - Special attention MUST be paid to the condition of straps and fixings once installed. The harness MUST be maintained according to the manufacturer's recommended best practice, and where possible kept free of dirt, oil and grease that could degrade any materials.

WINDOW NET

Requirement - A quick-release fabric window net MUST be fitted in the driver's side door window aperture of all saloon car formulas. Specification/Installation The width of the netting holes must NOT exceed a MAXIMUM size of 3in/75mm wide. The window net MUST be fitted such that it hangs down level with the steering wheel. The window net MUST be flexible and easily removable, independent of any movement of the driver's-side door.

CLOTHING

A flame-resistant race-suit/overall MUST be worn. Flame resistant race-suits/overalls MUST be manufactured from Proban, or material of a higher specification, e.g. Nomex. Flame resistant race-suits/overalls MUST be clearly marked with the relevant SFI, FIA or equivalent standard, or the manufacturer's statement of protection. Race-suits/overalls MUST be maintained in a clean and tidy condition. Race-suits/overalls manufactured/certified to Karting standards, including, but not limited to, the CIK-FIA Level 1 or Level 2 standards, are NOT permitted as they do NOT provide the appropriate level of heat/flame protection.

GLOVES

Flame resistant gloves MUST be worn. Flame resistant gloves MUST be clearly marked with the relevant SFI, FIA or equivalent standard, or the manufacturer's statement of protection.

BALACLAVAS

A flame resistant balaclava MUST be worn. Flame resistant balaclavas MUST be clearly marked with the relevant SFI, FIA or equivalent standard, or the manufacturer's statement of protection.

UNDERGARMENTS

Flame resistant socks and undergarments provide a high degree of protection and are highly recommended to all competitors.

WET WEATHER PROTECTION

Any wet-weather clothing must be worn in ADDITION to the required flame-resistant race-suit/overall specified above.

HEAD/NECK RESTRAINT

Neck braces are compulsory, or a FHR/HANS type device can be used.

FIRE EXTINGUISHERS

Requirements - A fire extinguisher, meeting the specifications below, MUST be carried in the competitor's tow-vehicle/transporter at all times. The fire extinguisher MUST be within easy reach of the competitor and team members, especially when re-fuelling the race car.

Specification - The fire extinguisher capacity MUST be at least a MINIMUM of 2Kg. The fire extinguisher MUST be of a dry powder or gas type. Old type BCF (green) fire extinguishers are NOT permitted.

25. Petrol must only be brought to the racing in a metal type Jerry can.
Containers must be clearly marked "PETROLEUM SPIRIT HIGHLY INFLAMMABLE".

26. Parents and Mechanics please note that smoking or drinking is not permitted in the Pits.

27. GENERAL RULES OF RACING

Each driver is only permitted one car per meeting and each car is only permitted one driver per meeting- this will be strictly enforced.

Any driver spinning the wheels or driving up and down the pits will be banned for a minimum of 4 meetings and not allowed to take part in that night's racing. Cars must travel at 5mph in the pits. No passengers allowed in or on the car. Drivers must not push or work on their cars during a race. No outside assistance is allowed during racing.

There must be no deliberate fencing, or driving at a driver's door or dangerous driving. 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'.

A driver who has deliberately fenced another driver will be black flagged and suspended for four meetings.

Drivers and teams are reminded that a secondary means of supporting a vehicle must be used when working underneath a car that has been jacked up (i.e. axle stands).

28. FLAG SIGNALS

GREEN - GO, All Clear to Race RED - Stop Racing Chequered Flag - Race Winner

YELLOW (Stationary) - Take care as a driver is still in a stationary car, but continue to Race.

YELLOW (Waved) - Race Suspension, All Cars must remain in single file and slow to 15mph, or in exceptional circumstances stop. No Overtaking is permitted.

Blue - Driver must hold their line as faster cars are trying to overtake.

Black - Driver disqualified for an infringement - driver must leave the track immediately.

White Flag with Red Cross - 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.

Black Cross - Driver under surveillance for a rules infringement, may be penalised after race conclusion.

White flag with Blue Centre - Drivers should exercise caution as oil or other debris may be on the track.

29. CARS ELIGIBLE FOR USE

Citroen C2 (2003-2009) 1.1i 8v - 1124cc

Citroen Saxo (1996-2003) 1.1i 8v - 1124cc

Fiat Punto Mk2 & Mk3 (1999-2010) 1.2i 16v – 1242cc

Ford Fiesta Mk4, Mk5 & Mk6 (1995-2008) 1.2i 16v - 1242cc

Engine code DHA/B/C/D/E/F/G or FUJB DURATEC or ZETEC S/SE

Nissan Micra K12 (2002-2010) 1.2i 16v - 1240cc

Peugeot 106 (1991-2003) 1.1i 8v - 1124cc

Peugeot 206 (1998-2003) 1.1i 8v - 1124cc

Renault Clio Mk2 & Mk3 (1998-2009) 1.2i 8v or 1.2i 16v - 1149cc

Engine code D7F or D4F

Seat Ibiza Mk3 (2001-2008) 1.2i 12v - 1198cc

Vauxhall Nova (1983-1993) 1.2 8v Carburettor – 1196cc

Vauxhall Corsa B & C (1993-2006) 1.2 8v Carburettor – 1196cc, 1.2i 8v - 1199cc, 1.2i 16v – 1229cc

Engine code C12NZ, X12SZ, X12XE ECOTEC, Z12XE ECOTEC or Z12XEP ECOTEC

Volkswagen Polo Mk4 (2002-2009) 1.2i 12v - 1198cc

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