



# *Oval Race Club*

2019

1 Litre Stockcar

Rules and Regulations



Racing at Barford  
Ringwood Raceway & Worthing



**These Rules and Regulations are set out and prepared and owned by Ringwood Raceway and its organisers. These are set out as a guide line to meet Health and Safety Requirements of the Formula and can be amended at any time without prior notice. The rights and copyright are preserved and must not be used or reworded by any other Promoter/Organiser without prior written consent**

## **1 LITRE STOCKCAR RULES & REGULATIONS – 2019**

### **1. THE FORMULA**

The object of the race is to complete the specified number of laps in the shortest time. You may push a car from behind. You must not deliberately lean into the safety fence or deliberately follow a car into the safety fence on the entry to a bend (whether from the rear or side of the car). Attacking the car from the safety infield is also not permitted. Actions deemed to be deliberate or dangerous will carry penalties.

Racing is in a clockwise direction on a clearly defined circuit with a separate infield. Any wheels passing over the demarcation lines or entering on to the grassed infield areas will mean that the driver will be penalised.

### **2. ELIGIBLE CARS**

1. The only eligible car for use is primarily the Nissan K11 Micra, 2 door or 4 door hatchback only. Sports models are not permitted. Standard 1.0 16 valve coil pack or distributor engines only. 1.0 K11 Nissan March engines/parts are not permitted
2. The promotion reserve the right to test/add other suitable vehicles into the formula at any time to secure the future of the formula.

### **3. VIOLATIONS**

1. When referring to the engine, gearbox, final drive, mechanical or constructional Rules & 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 the Standard Parts in any way.
2. It is the responsibility of the Driver to prove to the Promotion that the part is legal, by way of written proof of where the part originated. This must be undertaken within 7 days, otherwise the item in question will be deemed illegal, resulting in immediate suspension from racing & referral for disciplinary action. **Unless the rules say you can do it, you cannot do it!**
3. Presentation of a Vehicle for Scrutineering is a declaration by the entrant that the vehicle is eligible for that event.
4. Car, engines and fuel will be checked on a random basis. Violations or refusal to allow an engine check will result in an immediate suspension of all racing facilities.
5. All Car and Engine Specifications will be taken from either the manufacturers Technical Specifications or the Technical Service Data books as published by Glass's Guide.
6. Should a discrepancy occur between the Specifications then the Promotion will exercise its judgement, and that decision will be final.
7. Clarification on any one item may be sought from the Promoter.
8. Each driver is permitted one car per meeting and each car is permitted one driver per meeting.
9. Drivers have been advised to keep a check on other cars IF you think something is wrong please make the staging promoter aware.

10. Anyone found to be illegal with engine or suspension parts to be awarded a minimum of 3 months racing ban, and at discretion of the promotion may be extended further

#### 4. PERSONAL SAFETY

Drivers are advised that under Health & Safety, they are responsible for their own and their Mechanic's actions. Promoters have had complaints made about Registered Drivers & Mechanics consuming large amounts of alcohol at meetings, which could affect their judgement or be detrimental to their health, when medical attention has to be administered by Paramedics, Private Medical Cover supplier or Hospital Staff. Should an incident occur that proves fatal on the raceway and you are involved, it is likely that the Police will want to interview you. **If you drive, don't drink!** Scrutineers and Officials will report to the Clerk of the Course, anybody they believe is under the influence of Drink or Drugs. Drivers whom it is thought are under the influence may be breathalysed. You have been warned!

##### 4a Flag Signals

- Waved Green Flag – Go, the race is on.
- Waved Red Flag – Stop racing, slow down and stop.
- Chequered Flag – Race winner has crossed the line, continue to race until the Red Flag is shown.
- Held Yellow Flag – Beware, you are approaching a hazard on the track, continue to race.
- Waved Yellow – slow down to 15mph, hold you position, do not overtake any other cars.
- Waved Blue Flag – Shown to a driver who must hold his racing line. Driver must either hold a line on the inner part of the track or the outer part of the track, not weave between both.
- Blue & White Flag – Give up your track position, you have not taken notice of Blue Flags.
- White Flag with a Blue Spot – Oil on the track.
- Waved Black Flag – You are disqualified, pull of the track immediately.
- Black Cross on a White Board – You have committed an infringement and may be penalised in the results.
- White Flag with a Red Cross – Technical Disqualification, leave the track immediately.

#### 5. SAFETY EQUIPMENT

##### A. CRASH HELMET GOGGLES AND VISOR

A helmet conforming to at least one of the approved standards **MUST** be worn. 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.

Shatterproof goggles or a shatterproof visor **MUST** be worn with the helmet at all times. the use of tinted visors is **NOT** advisable

##### B. RACING OVERALLS

**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 racesuits/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**

### **C. 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.

### **D. 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.

### **E. NECK BRACE**

A Neck Brace is compulsory, spine support is also recommended. The use of Hans device is permitted.

### **F. WET WEATHER CLOTHING**

Wet Weather Clothing is also recommended and must be worn in addition to, and **not** instead of the racing overalls.

### **G. WINDOW NET**

A quick-release fabric window net **MUST** be fitted in the driver's side door window aperture of all saloon car formulas, with the exception of Banger type formulas. 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.

### **H. FIRE EXTINGUISHER**

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 at all times, especially when re-fuelling the racecar. 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

### **I. COMPETITION STYLE DRIVERS SEAT WITH HEAD RESTRAINT/THE HEADREST**

You must have a competition type driving seat with a head restraint. Reclining bucket seats are not permitted. The seat should occupy its original position where possible and be suitably supported at shoulder height and on both sides and back, with suitable frame and stiffeners. The headrest of your seat must have a support in place.

Top of driver's seat must be supported with diagonal brace/s connected to top cross rail between b post

### **J. SAFETY HARNESS**

A full safety harness **MUST** be used in accordance with the specifications below. All mandated straps **MUST** be used at all times, 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 “Tubegrip” elasticated bandage, slid over the hooked buckle is sufficient for this purpose.

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 nonhomologated 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 1¼in /44mm in width.

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) in order 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. 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](http://www.willans.com) • [www.schrothracing.com](http://www.schrothracing.com) • [www.tris-motorsport.com](http://www.tris-motorsport.com) • [www.racequip.com](http://www.racequip.com) Safety Standards • [www.sfifoundation.com](http://www.sfifoundation.com) • [www.fia.com/homologations](http://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. 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

## 6. ROLL CAGE AND INTERNAL IRONWORK

Key: SHS Square Hollow Section  
RHS Rectangular Hollow Section  
CHS – Circular Hollow Section

The roof may be removed to aid welding and fitting of the cage, but it must not be lowered or shortened when refitted. The roll cage must be constructed from either 38mm x 38mm or 40mm x 40mm SHS or CHS, with a wall thickness of 3 to 3.5mm and it must support both the A & B pillars. The cage must consist of the following minimum ironwork:

1. One front hoop over the A posts.
2. One rear hoop over the B posts

3. Two Top rail roof rail bars connecting the A & B hoops, with an additional third central roof bar.
3. A 3mm plate is to be welded on all four sides on top of the roll cage frame above the driver to the central bar.
4. The roll cage hoop feet must be welded to four 3mm thick plates 100mm square or alternatively welded to the iron work.
5. There must be one front crossbar at dash height and must be attached to both top side iron top rails, these must be gusseted
6. There must be two crossbars behind the driver, these must be constructed of 40mmx40mmx3mm SHS one of which must be at shoulder height to support the seat. Top Cross bar must attach to both top side Irons and the lower Cross Bar must attach to both Lower Side Irons. Both Crossmembers must be triangular gusseted to Side Irons.
7. There Must Be a Minimum of 3 Upright Bars to connect Lower and Top B post Crossmembers. One must be central. The other two must be evenly spaced.
8. Any part of the cage coming in to contact with the driver must be padded.
9. Gusseting of the cage is permitted.
10. 2 Rear facing diagonal brace bars are compulsory constructed from min 38x38mmx3mm SHS/CHS from top of b post hoop towards wheel arches.
11. An additional diagonal brace bar is compulsory from top of b post hoop (drivers side) facing downwards towards NSR wheel arch.
12. 1 or 2 Windscreen bars can be used must be central within screen aperture and symmetrical within the aperture if 2 being used.
13. There Must be a sill bar made from min 38mmx38mmx3mm CHS or 40mmx40mmx3mm SHS and connect to both A Post and B Post Hoops. The Sill Bar Must be braced to the lower Side Rail, These must be symmetrical on both sides of the car.
14. There must be two 40mmx40mmx3mm SHS connecting bars laid on top of the boot floor one either side of the spare wheel well and connect to the rear bumper and Lower B post Crossmember. An X Shaped Bracing can be welded between these rails or led on top of them constructed from 40mmx40mmx33mm SHS.



## 7. FRONT BUMPER IRONS, BRACING AND FRONT CHASSIS IRON

The Front bumper must be constructed from 40mmx40mmx3mm SHS iron. Must consist of min/max 6 uprights Including fence side rubbing iron and 2 cross bars which can be straight or angled to suit contour of the vehicle being used.

The front bumper must be central and symmetrical in design and not offset.

A cross bar constructed from 40mmx40mmx3mm SHS iron must run across front of both front chassis rail (see illustration on front cover). A maximum of 4 brace bars may connect to the bottom front bumper iron.

40mmx40mmx3mm SHS iron can enter the front chassis rail from front bumper, this can enter through the bulkhead into the inside of the car but must step down to a floor iron constructed of 40mmx40mmx3mm. The floor iron can run from bulkhead to rear of the rear passenger footwell and a support bar added to meet the lower B post crossbar. Full chassis must remain as standard.

A Cross brace (Y Bar) from outer front bumper iron to offside A Post of the cage with 2 bends constructed of 38mmx38mmx3mm CHS or 40mmx40mmx3mm SHS. (See Picture 1) **These are optional**

Front Diagonal Brace Bars constructed using 40mmx40mmx3mm RHS fitted from the top side iron connecting diagonally to the top iron of the front bumper. There must be 1 Diagonal bar on the Nearside and 1 Diagonal bar on the offside and both be symmetrical in design. (See Picture 2) **These are Optional for 2019 season but looking to be compulsory from Jan 1<sup>st</sup> 2020 to meet health and safety requirements.** The removal of inner wings along the front chassis legs to the front edge of the strut tower is to allow easy repair is permitted. See below picture on right hand side below. Full Chassis Legs must remain as standard.



## 8. REAR BUMPER IRONS

Rear bumper must be constructed from 40mmx40mmx3mm SHS Iron. The construction must be symmetrical and central to the car and not offset.

Rear Bumper may be straight or curved to the contour of the car being used.

Rear Bumper must consist of min 5 uprights and max 6 upright equally spaced.

Must be minimum Of 10 inches between bottom of top rail and top of bottom rail.



## 9. SIDE IRONS

These must be constructed the same on both sides of the vehicle using 40mmx40mmx3mm SHS Iron.

These must be symmetrical on both sides of the car. These must be fitted just below door handle swage line and be no lower than a minimum of **16 inches** above top of the first sill return to the top edge of top rail. **See Illustrations**



Must be triangular braced to both b post crossmembers and be brace to dash bars.

The top side iron must use 2 x 40mmx40mmx3mm SHS welded together the outer must connect to the top rail of both front and rear bumpers.

The Inner top rail must use 40x40mmx3mm SHS, must be 80 inches in length. These irons must start rear of the b post and finish level with front edge of the front inner wing crumple point (**See Illustration of Crumple Point**), these irons must not touch front or rear bumper.



Max One brace bar can connect to top side iron and connect onto the boot floor rail each side. This must be symmetrical both sides of the car.

Lower side irons must connect to the inner sill bar (Min/Max 3-5 Braces)

The Lower Side iron can be constructed from either 40mmx40mmx3mm SHS Iron, to be doubled up welded side by side, and be symmetrical on both sides of car.

There must be a minimum of 4 uprights max of 6 to connect both top and bottom side irons and must be a minimum of 10 inches to separate the two rails. Either 40x40mmx3mm SHS or 50mmx25mmx3mm RHS. These can be placed internally or externally of the steel plate mentioned below



A min of 2mm and max 3mm thick steel plate must be welded between top and lower Side Irons on both sides of car. The same thickness must be used on each side of the car.



## 10. REAR WING IRONS AND REAR WHEEL PROTECTION

Rear Wing Irons are compulsory and can be constructed of the 2 following procedures.

- A) Constructed of 40mmx40mmx3mm SHS Iron and connect from bottom rear bumper iron and connect to the bottom side iron. If these are fitted they must have a central bar connected to the top side iron. Must be symmetrical on both sides. This ruling will be discontinued 31<sup>st</sup> December 2019 and only rule 10b will be enforce from 1<sup>st</sup> January 2020.
- B) If not fitting the above Rear protection guard then a piece of 50mmx25mmx3mm RHS or 40mmx40mmx3mm SHS must be fitted to bottom edge of top side iron and connect to side iron up right. And diagonal brace to rear bumper. Again must be symmetrical on both sides of the car.



## 11. FRONT WISHBONE BRACES

These are permitted.

## 12. SUSPENSION, STEERING, BRAKES, AXLES, AND DIFFERENTIALS

- A) Camber/Castor is free on front wheels only.
- B) Rear Camber Must remain Standard, No Shimming
- C) All Suspension Mounting Points Must remain standard and un modified.
- D) The Standard Nissan Micra K11 road springs may be cut down, no welding, one road spring permitted per corner. No doubling up of springs. Rubber spring assistors are permitted.
- E) Rear springs must have a secondary fixing
- F) Front strut to hub mounting holes are aloud to be elongated to achieve desired camber adjustment but must have washer each side each mounting hole welded so becomes non-adjustable. G) The heating, cutting or bending hubs is not permitted.
- H) Front lower arms can be cut and lengthened to achieve castor/camber settings.
- I) Driveshafts must remain standard, the use of a washer between driveshaft and hub is permitted.
- J) Rear Panhard rods may be strengthened only.

- K) Differentials Must be Original to the Nissan Micra K11 Range, must remain standard and unlocked, LSD differentials are not permitted. (Anyone caught will automatically receive 12 months racing ban)
- L) Steering column can be altered to suit driver, rose joints and quick release hubs are permitted.
- M) The use of Nissan Micra K11 Shock Absorbers only, must be oil or gas filled. Aftermarket shock absorbers are permitted from motor factor. The use of competition type or adjustable Shock Absorbers are not permitted.
- N) **Total Weight of Vehicle Measured Without Driver With NO Fuel and Correct Coolant/ Correct Engine Oil Level/and correct Gearbox Oil Level MUST be a MIN of 775kg and Total Weight MUST NOT Exceed MAX 825Kg, No Adding Weights such as dumbbells or bolted items these are Not Permitted if adding of taking away ballast it must be using SHS metal stated within these rules and be symmetrical within the car.**
- O) **Total inside Weight when measured must not Exceed 54%, (This includes race damage) if measured over this figure you WILL be excluded from any race results or championships.**

### 13. WHEEL RIMS AND TYRES

- A) Only Tyres sizes to be used are to be 155/70r13 or 165/60r14 as per manufacturers specifications.
- B) Tyres must be road legal, competition/trackday 1a,1b,1c tyres and remoulds are not permitted. Uniroyal expert tyres can be used.
- C) Wheel rims must be able to fit with all correct wheel nuts/bolts fixings without modification and must be torqued to the correct settings as per manufacturers specifications. Promoters/organisers will not be held responsible for any wheel/tyre coming of vehicle during racing. Drivers responsibility.
- D) Steel wheels only can be used Maximum 6j rims can be used, all four wheels must be the same all around the vehicle. Running insets and offset rims is not permitted. Stretching or cutting/banding is not permitted. The mixing and matching of tyre sizes is not permitted, you can on run 4 13s or 4 14s.
- E) Tyre Buffing is not permitted
- F) Tyre Softner is not permitted. Tyres will be tested with durometer at any time and must not exceed less than 50 when tested.
- G) Cutting of tread is not permitted.

### 14. GEARBOX

- A) The original K11 Nissan Micra casing must be used.
- B) Internal Gearing must be standard to the gearbox being used and be within the K11 Nissan Micra Range. No interchanging 2<sup>nd</sup> gears from other gearboxes .
- C) Differentials (See Section 12)
- D) Only Standard 1 Litre K11 Nissan Micra Flywheels must be used and may be lightened. The 3 Piece Flywheels or Ike 3 Piece flywheels is NOT permitted.

### 15. ENGINE, COOLING AND ECU

- A) Engines to be used is the standard 1litre K11 Nissan Micra 16 Valve engine. Both coil pack and Distributor engines can be used. The 1.0 K11 Nissan March Engine or parts is NOT permitted.
- B) Rev Limiters may be removed on distributor engines and must remain on coil pack engines. Immobilisers may be removed.
- C) Air Filters are free, but the use of Ram Air Filters or Forced Induction Systems are not permitted.
- D) No Interchanging of Injectors. Must remain Standard to the engine being used.
- E) Cylinder Head may be Skimmed but must measure between 121.1mm and 121.3mm

- F) No Competition Head Gaskets are permitted.
- G) All Cylinder head internal components and external manifolds, throttle bodies must be standard to the engine being used and not modified unless stated within these rules.
- H) The Block must remain standard to the manufacturer's specifications, the skimming of the block is not permitted. The stroke and internal parts must remain standard to the manufacturers specifications to the engine being used.
- I) The use of competition parts or Arp Bolts or equivalent are not permitted.
- J) Oil viscosity Is Free.
- K) A buy back rule of £150 sterling is in place that another competitor may purchase your engine excluding ancillaries.
- L) Engine and Gearbox mounts must remain standard, only exception is front crossmember mounting may be solid. The Drivers Side Engine Mounting Point can welded to help prevent mounting coming away from body see Illustrations below.



- M)
- N) Ecu being used must be from a standard 1 Litre K11 Nissan Micra Only (No Nissan March Ecu) and remain standard with no modification. **ONLY THE FOLLOWING ECUS CAN BE USED, 10,12 XR,XU,XR,Y1,YW OR ZR. NO OTHER ECUS ARE PERMITTED.** You're ecu may be swapped or replaced with an identical one by the promoter at any time. If found to be tampered with or deemed illegal your results may be withdrawn and a ban imposed. You have been Warned!
- O) Radiators are free but must remain in original position
- P) Electric Water pumps are not permitted
- Q) Fan May Be Fitted

## 16. ENGINE SEALING

A) **Promoter:** We may at any time require your engine or other parts to be sealed. This may or may not mean Your engine/parts will automatically be stripped or checked. It could be that we wish to monitor your Performance or seek clarification on an item. It is normal to strip engines at all major Championships unless they run consecutively in which case by agreement with the **Promoter**, stripping may be postponed.

**Driver:** Drivers wishing to have their engines sealed may do so. It will require two people (one may be an Official, the other a Scrutineer) to be present at the final stages of a build and it will incur a charge based on the time and distance travelled. If this option is taken at a major Championship your engine will not require stripping unless the seals have been broken. Seals can only be removed by the **Promoter's** Officials and if they are removed without permission the engine/parts will be deemed to be illegal and the Driver suspended pending a Board of Control meeting. If any engine/parts are sealed because Championship events are within a period, which may exclude that the Driver due to a rebuild, the Driver with the **Promoter's** agreement, postpone stripping for three meetings.

It is the Driver's responsibility to make provision for the sealing of the engine by drilling 1.5mm sealing holes in the following bolts/nuts and marked with red paint for identification purposes:

Either side of the Sump.

To Head bolts, if not covered wholly by a rocker/cam cover.

Two inlet manifold bolts.

Two Rocker/cam cover bolts.

The Bell housing.

The Carburettor body and the mounting bolts/nuts.

## **17. OIL CATCH TANK**

1. A 0.5-1 litre oil catch tank must be fitted in the engine bay.
2. The tank must have a minimum of 2 breather pipes connected to it from both the rocker box breathers. Ineffective tanks during racing or practice will mean the car being withdrawn from the event.

## **18. FUEL SYSTEM**

1. Fuel tanks must be metal or FIA approved and fitted inside the car behind b post cross member but no further back than centre rear axle line, but not below the chassis rails and above floor line and must be positioned offset from the centre line of the car.
2. A complete fire wall must cover the tank and electric fuel pump.
3. You cannot enclose the rear boot area from the seat to the rear window aperture.
4. The tank must have a maximum capacity of 10 litres(2 Gallon).
5. Fuel caps must be of a metal screw type, no push fit types are allowed.
6. The tank must have a positive means of fixing.
7. The fuel outlet, must be from the top of the tank.
8. Fuel regulators are allowed.
9. An electric fuel pump can replace the mechanical one.
10. All fuel lines must be inside the car and be metal or metal covered.
11. A fuel shut off tap must be within easy reach of the driver.
12. A breather pipe must be fitted which should incorporate a one – way valve, with the pipe terminating below the tank so as to prevent spillage if inverted. Must not be drilled or tampered with **Min 6 Month ban**
13. The tank should not be below the chassis rails so where the floor exists, four 50mm diameter holes should be drilled for drainage purposes.
14. Only roadside fuel can be used. No additives are allowed.

### **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), BS 7800 (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 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 degrees	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.

#### 19. EXHAUST SYSTEM

- A) The original Standard exhaust manifold Pre Cat (the centres can be removed) must be used. Exhaust Pipe after cat must use a suitable silencer the use of a tractor silencer AX891, Simpson and Edwards Silencer's are permitted. Stainless centre exhaust is not permitted and max 2 inch bore. Must remain in standard

position to car, and no further back than the centre line of the rear axle . Secondary fixings must be in place in case exhaust becomes loose during racing.

- B) If system becomes noisy or Breaks exceeding the noise decibel readings for the raceway you may be excluded form racing.

## **20. BATTERIES & THE ELECTRICAL SYSTEM**

1. The Battery(ies) must be securely fixed and covered with rot proof material if they are not of the sealed type.

Battery(ies) may be in a battery box, and the battery must be positioned in the car rear of the driver but forward of the axle centre line.

2. A battery master switch must be fitted in the rear left-hand window and clearly marked "ON – OFF" or have an electrical danger decal.

When an electric fuel pump is used, a cut-off switch must be positioned within easy reach of the driver.

3. A self-starter motor must be fitted and working at all times.
4. A 24 volt system may be used.

## **21. REARVIEW MIRROR**

1. A rearview mirror may be fitted. If fitted, this mirror must be shatterproof and secured safely.
2. An External mirror is not permitted.

## **22. BODYWORK**

- A) Body work must use original panels no fibre glass or plastic types and must stay original. Front wings may be cut below Top rail Swage line. B) Door skins may be de skimmed.  
C) Bonnet and Boot must have 2 securing fixings.  
D) Body work must be of good presentable condition, excessively damaged cars may be not allowed to race

## **23. PAINTWORK**

1. The external appearance of the car must look professional at all times, drivers of scruffy looking cars will be told to improve their appearance and may not be allowed to race.
2. A maximum of two cars may be painted in team colours or painted to look similar, unless it is required by the Promoter for a particular team event.
3. 90% of the roof must be painted in the correct roof grading unless you are a Superstar or a current Championship holder, when the roof must be painted accordingly.
4. Sign writing must be professional and be approved by the Promoter.

## **24. NAME PLATES FRONT AND REAR**

1. Front Name plate must be fitted with your name written upon it top of the windscreen aperture
2. Rear Name Plate may be fitted to top of the rear screen aperture

## **25. FIN PLATES & ROOF NUMBER**

1. Fin plates must be fitted above the roof line but it should not be larger than 305mm or 12" by 559mm or 22" wide.
2. Fin plate numbers must be 229mm or 9" high by 38mm or 1½" in width, black numbers on a white background. Please ensure they are correct.

3. The racing number can be painted on the roof, but please be aware that grading colours must be 90% of the roof.

## 26. DOOR NUMBERS

1. The drivers racing number must appear on both sides of the car. The numbers should be 300mm or 12" high x 50mm or 2" wide, on a contrasting background, which must extend a minimum of 50mm or 2" beyond the numbers.

## 27. SPECIFICATION AND RULE CHANGES

The Promotion may at any time make amendments to the Specifications for the following reasons: □  
In the interests of Safety.

- Reduce costs for the driver.
- In areas that are detrimental to the future of the formula.
- If an unnecessary advantage has been deemed.

Current registered drivers will be notified automatically of any changes.

## 28. ROOF GRADING

1. All roof grade Champions must start at the rear of the Grid, unless told otherwise by an Official.
2. If you win a race at a meeting; you will start the NEXT race from the rear of your grade. Should you win another race at the same meeting – you will be automatically upgraded.
3. Drivers are reminded that they should line up in points order on the grid with the engine switched off. Drivers with incorrectly painted roofs after the points chart has been issued will have to start at the rear of the grid.

Grid Line up / Roof Order:

- White
- Yellow
- Blue
- Red
- Blue & Yellow Chequered (Essex Champion)
- Blue & White Chequered (Southern Champion)
- Pink & Blue Chequered (Sussex Champion)
- Silver Roof (Ringwood Points Champions)
- Red with Gold Stripe (National Champion)
- White with Red Cross (English Champion)
- Gold (World Champion)

## 29. SOCIAL MEDIA, FACEBOOK, TWITTER, INSTAGRAM, OR SIMILAR

Unacceptable behaviour on social media towards The Promoter, Organiser, a fellow competitor, pit crew, family member will result in a 12 Month ban.

**N.B – NSA (National Stockcar Association) is governed and controlled by the directors of Ringwood Raceway LTD and accepted and Associate Members have no influence control over Rules and Regulations Set out by the governing and controlling Director.**

The use of logos associated to NSA (National Stockcar Association) is not permitted unless obtained in writing from the governing Directors.

Acceptance into the NSA is by way of Paid Membership under licence and contract terms with the Association and its Governing Director.