

# <u>1ltr Hot Rods</u> 2024 Rules & Regulations

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# 1. DEFINITION

This formula is for 10-16 year olds and will drive the Nissan K11 Micra on oval circuits all around the country in a non-contact class.



#### 2. WHO CAN RACE

- All 1 litre Hot Rod drivers must apply for a 1 litre Hot Rod licence which costs £50.00 for the year.
- Once registered it then entitles you to pick your race number, subject to availability, and you will be issued with a copy of the 1 litre Hot Rod rules and specifications.
- You may only race if you have pre-booked through the Spedeworth office by calling 01252 322920 or via the website. Bookings will be on a first come first serve basis, so book early.
- Please note that <u>no</u> day licences or temporary licences will be issued!
- At a meeting all drivers must book in at the Pit office with their logbook where they will be given an entry ticket for themselves only.
- You cannot register mechanics for this formula
- You must be between 10 and 16 years old to race. A driver must retire prior to their 16<sup>th</sup> birthday.
- All drivers must pass a ORCi competency test, this will be done at Aldershot Raceway at a cost of £100. Contact 01252 322920.

# 3. WHAT TO DO NEXT

- Check through the fixture list for the 1 litre Hot Rods.
- Contact the Stock Car office to book an event.
- Bookings are done on a first come first served basis.
- On arrival to the stadium, you must first booking at the Pit office.
- You must then get the car safety checked. A safety check sticker will be issued by the scrutineer which has to be displayed in a prominent position on the car.

• Ensure you are familiar with the raceway flags and rules of racing as you are now ready to race and will come under all the rules and regulations similar of the promotion.

#### 4. ELIGIBLE CARS

• This formula is based round a Nissan K11 Micra, using a 1ltr distributor engine only, leaving it on standard injection system.

### **5. INITIAL PREPARATION**

- Remove all exterior, mouldings screen, glass, lamps and handles.
- Remove all interior, trim, the dash and seats.
- Remove the fuel tank spare wheel, carrier and towbar is fitted.
- Remove all obsolete, wiring and interior debris from the car.
- The plastic front and rear bumpers must remain fitted when the car is raced.
- Read and familiarise yourself with the 1ltr Hot Rod Rules & Regulations for preparing the race car.

# 6. 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 & also Mechanics, consuming large amounts of alcohol at meetings, which could effect their judgement or be detrimental to their health, when medical attention has to be administered by Paramedics, St Johns 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 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 breathalysed. You have been warned!

#### Flags as used by the Starting Marshall & Trackside Safety Staff.

- Waved Green Flag Go, the race is on.
- Waved Red Flag Stop racing, slow down & stop immediately.
- 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, hold your position, and do not overtake any other cars.
- White Flag with a Blue spot Oil / debris on the track.
- A Blue Flag This is shown to a driver who must hold his racing line. You may be holding up another driver who has been trying to pass you but is being baulked, or you are spoiling a race by holding up a pack behind you, by your driving style.
  Once shown the flag you must either hold a racing line on the inner part of the track or the outer part of the track, not weave between both. If after two laps you fail to obey this Blue Flag you will shown a Blue & White Fag.
- Blue & White Flag Give up your track position, you have not taken notice of the Blue flags.
- Black cross on a White board You have committed an infringement and may be penalised in the results.

- Waved Black Flag You are disqualified, pull off the track immediately.
- White Flag with Red Cross Technical Disqualification, leave track immediately

Drivers are also reminded that they should line up on the grid with their engines switched off in the correct points order, unless told otherwise.

### 7. SAFETY EQUIPMENT

#### 1. CRASH HELMET

*Please visit the ORCi website <u>www.orci.co.uk</u> for current safety equipment regulations.* 

#### 2. RACING OVERALLS

*Please visit the ORCi website <u>www.orci.co.uk</u> for current safety equipment regulations.* 

#### 3. GLOVES

*Please visit the ORCi website <u>www.orci.co.uk</u> for current safety equipment regulations.* 

#### 4. BALACLAVAS

*Please visit the ORCi website <u>www.orci.co.uk</u> for current safety equipment regulations.* 

#### 5. A NECK BRACE

*Please visit the ORCi website <u>www.orci.co.uk</u> for current safety equipment regulations.* 

#### 6. WET WEATHER CLOTHING

Please visit the ORCi website <u>www.orci.co.uk</u> for current safety equipment regulations.

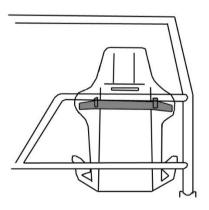
#### 7. 1kg FIRE EXTINGUISHER

Please visit the ORCi website <u>www.orci.co.uk</u> for current safety equipment regulations.

#### 8. DRIVERS SEAT WITH HEAD RESTRAINT/WINDOW NETS

You must have a Driving Seat with a head restraint and this may be of a competition type. The seat should occupy its original position where possible and be suitably supported at shoulder height and on both of the sides and back, with a suitable framework or seat stiffener's.

Additional wrap around seat support at shoulder height.



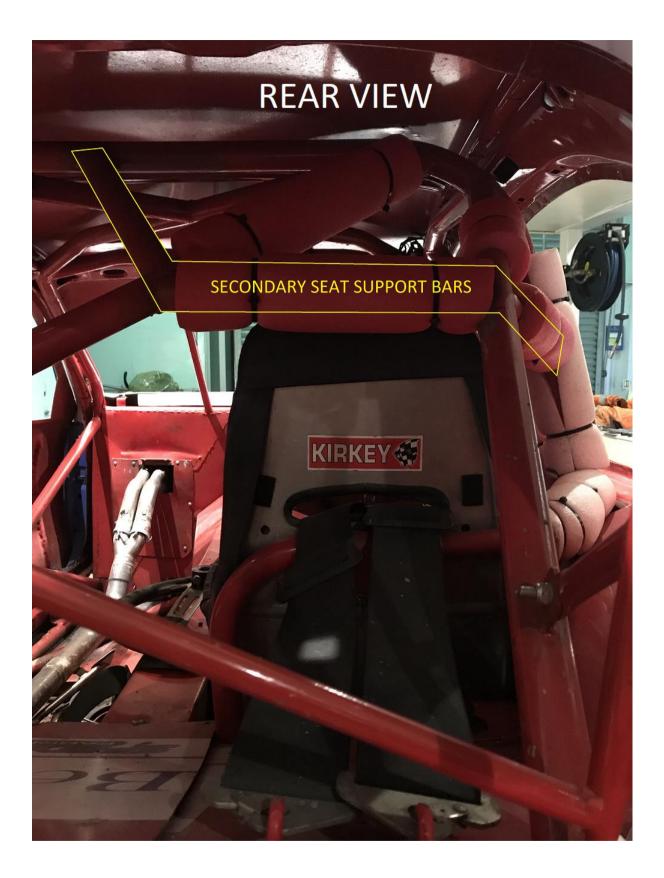
You may fit a Head Restraint Net on the on the safety fence side of the race car only. A quick release window net must be fitted to the driver's door window aperture and must be of quick release/cloth type only. Net spacing must be 76mm x 76mm maximum.

If the seat sits behind the b/pillar hoop a secondary support to the cage must be added. An example of this is shown in the diagrams within this section of the document. If the modification goes to the floor it must be sat on 23cm square plate 3mm (min.) thick.

This new section must not be constructed in a way that a drivers helmet can make contact with it.

Material od and thickness as rest of roll cage.





9. SAFETY HARNESS Please visit the ORCi website <u>www.orci.co.uk</u> for current safety equipment regulations.

### 8. VIOLATIONS

- When referring to the engine, gearbox, final drive, mechanical or construction 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.*
- 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!**
- Presentation of a Vehicle for Scrutineering is a declaration by the entrant that the vehicle is eligible for that event.
- Car engines & 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.
- 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.
- Should a discrepancy occur between the Specifications then the Promotion will exercise its judgement, and that decision will be final.
- Clarification on any one item may be sought from the Promoter.
- Each driver is permitted one car per meeting & each car is permitted one driver per meeting.

#### 9. VEHICLE WEIGHT

- The minimum car total weight is 640kg.
- The right-hand side weight is maximum of 54% of the total vehicle weight.
- If you are checked and over the 54% but under 54.5% on your first offence you will lose all points/monies due on the day and receive a final warning & loaded for the day. You must have this written in your log book.
- Anyone over 54.5% on their first check will receive an automatic one meeting ban and loaded immediately with loss of any points or monies due (if applicable).
- If a driver is found over 54.5% on a second occasion the penalty will automatically be doubled, or possibly carry a longer suspension. Checks will be carried out at any time.

Underweight Vehicle Bans	
Car Underweight by:	<b>Banned From Racing For:</b>
0.001kg – 1.0kg	1 month
1.001kg – 2.0kg	2 months
2.001kg – 3.0kg	3 months
3.001kg & over	6 months

### 10. WHEEL BASE

- Nissan K11 Micra wheelbase is 2360mm.
- You can move wheel base to a max of 38mm total difference between both front wheels.
- The wheel base can be altered by cutting and welding lower wishbones.

### 11. ROLL CAGE

- One front hoop over the A post.
- One rear hoop over B post.
- Three rail roof bars connecting A&B hoops.
- There must be one front crossbar going across the bottom of the window aperture.
- There must be one cross bar behind the driver, and there should be a shoulder height support to the seat.
- The roll cage hoop feet must be welded to four 3mm thick plates 100mm square or to a piece of bar or box 38x38mm with a minimum thickness of 2.5mm, connecting the front & rear hoop feet & welded to the floor. This bar does not replace a door chicken bar.
- Two door chicken bars with connecting bracing fitted to both doors, the lower bar being 75mm or 3" above the door sill plus two connecting bars.
- Rear facing ironwork from off of the cage is permitted but it must terminate 100mm or 4" from the back panel.
- Both suspension turrets can be supported by two brace bars from off of the front of the cage going through the bulkhead, but it must be made from the same material as the cage.
- Any part of the cage coming in to contact with the driver must be padded.
- You must have a minimum two stay bars (<u>must</u> be either Fig 2 (b) or 2 (c)) coming from the hoop B down towards the rear panel but must finish at least 4" in front of the rear panel.

# 12. BODY SHELL

- Silhouette of the car cannot be altered.
- The doors, rear wings, the boot, the bonnet may have the inner panels removed. The roof lining and rear pillars up to the B pillar may be removed.
- Headlamp apertures may be filled in with metal or fibreglass panels.
- One piece fibreglass tailgate is permitted, but not compulsory.
- Original plastic front and rear bumpers must be fitted to the car at all times.
- Drivers door must open and have a secure fixing, passenger side door can be fixed shut.
- Hot rod style aerofoil is permitted.
- Bonnet must be fixed with 4 fixings, can be left on the hinges with two bonnet pins, or 4 bonnet pins in total.
- You must have the minimum of two mirrors one inside the car and one driver-side mirror.
- The bulkhead of the car must be secure and complete to create a firewall between the driver and the engine.
- Wing, Arch, & side Skirt Supports must be tube only 12.7mm x 1.6mm thick, 0.5 inch x 16 Gauge Mild Steel Tube.
- Front Bumper Iron replacement must not exceed more than 25.4mm x25.4mm x1.6mm, 1x1 x 16mm Gauge mild steel only, this is the maximum size and thickness of replacement standard parts.

# 13. SUSPENSION

- Standard replacement shocks only, can be oil or gas pressured but must not be competition or valved in anyway, and must run standard components in a standard shock.
- Springs are free, must be securely fitted.
- Camber on both front wheels is free but must not be adjustable apart from rule 13.4 only, you must run standard Nissan K11 Micra driveshaft.
- Passenger side strut top may have holes elongated to gain camber.
- Rear axle must remain standard, standard length link arms, standard length panhard rod, panhard rod may be strengthened.
- Front hubs must remain standard apart from camber gains, no moving steering arms or any other modifications.

### 14. BRAKES

- Standard brakes only, no rear disc, it must be drums.
- Hand brake must be operational.
- You may remove brave pressure valve on rear.
- Brakes must work on all 4 wheels at all times.
- Must have working brake lights at all times.

# 15. WHEELS & TYRES

- 13" or 14" wheels up to a maximum of 6j wide.
- Tyres up to maximum of 185 wide.
- Tyres to minimum profile of 55.
- Same size wheel and tyre across the same axle at all times.
- Road legal tyres only. No semi slick or competition tyres, if you have doubts with tyres please ask before you spend your money.

### 16. GEARBOX

- Any k11 Micra gearbox may be used.
- Gearbox must have breather pipe going into catch tank.
- You must use standard drive shafts only.

# 17. ENGINE

- 1 litre 16 valve distributor engines only.
- Flywheel minimum weight 6kgs.
- Head skim to max of 50 thou (minimum head thickness to be confirmed).
- Standard Nissan cams only, no aftermarket.
- Cam lobe size of maximum 38.2mm
- Standard valves & valve springs. You can 3 angle the valve seats.
- Exhaust manifold must stay as standard, the rest of exhaust if free.
- Air intake is free, bonnet or wings not allowed to be modified to accept intake pipes/filter.
- Standard throttle body.
- Standard inlet manifold.
- Crank, rods & pistons all internal engine parts must be standard k11 distributor engine parts.

- Rev limiter may be removed.
- Engine mounts may be polybushed.

### **18. OIL CATCH TANK**

- A metal type catch tank is compulsory.
- You must run your engine, breather and gearbox breather into this.

# 19. IGNITION / ECU

- Standard ecu with in manufacture range is allowed.
- Any thought to have tampered with their ECU will have it taken away at the end of the meeting and checked for legality.
- Standard distributor, you may remove the rev limiter.

#### 20. FUEL SYSTEM

- Fuel tanks must be metal or FIA approved & fitted behind the driver but in front of the rear axle centre line.
- The tank must a have a maximum capacity of 9 litres.
- <u>The fuel tank must be above the floor or rear seat and must not be cut in any way to</u> <u>fit.</u> Four 50mm diameter holes should be drilled for drainage purposes.
- Fuel caps must be of a metal screw type, no push fit types are allowed
- The fuel outlet must be from the top of the tank.
- The tank must have a positive means of fixing.
- 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.
- All fuel lines must be inside the car and be metal or metal covered.
- A fuel shut off tap must be within easy reach of the driver
- A complete fire wall must cover the tank.
- Only roadside fuel can be used. No additives are allowed.

#### 21. BATTERY

- Battery must be located behind the front strut top, but in front of the rear shock mounts must have the positive terminal covered.
- Must be fixed securely and have a battery isolator switch on the passenger side of the car.

# **22.** INTERIOR MIRROR

- The Interior mirror must be fitted.
- Maximum mirror size is 152 x 100mm or 6"x4" and if glass, it must be covered in a clear plastic film to stop the glass fragmenting.

# 23. DOOR MIRRORS

• A Drivers door mirror must be fitted but its mounting must be of a shear or spring loaded type and it must not protrude beyond the extreme body width of the car.

• Maximum mirror size is 152 x 100mm or 6"x4" and if glass, it must be covered in a clear plastic film to stop the glass fragmenting.

# 24. WINDSCREEN/GLASS

• A mesh panel covering the driver's side of the screen is permitted, but must be fitted in a way to be easily ripped off IE Cable tied in.

# 25. STOP LIGHTS

- Stop lights must be fitted facing rearwards & can either be two separate lamps, a minimum of 762mm or 30" apart or a centrally fitted strip-light (LED type ).
- When two lights are fitted, either from the underside of the tailgate or the top of the parcel shelf, they must be no greater than 21 Watts in Power. The two lamps must be a minimum of 75mm or 3" & a maximum of 127mm or 5" in size, round or rectangular but they must be a pair.
- Strip-lights must be no wider than 406mm or 16".
- The lights must operate off of a standard brake stop light switch.
- All brake lights must be red.

## 26. PAINT WORK

- The external appearance of the car must look bright & professional at all times drivers of scruffy looking cars will be told to improve their appearance & may not be allowed to race.
- 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.
- **100%** of the roof must be painted in the correct roof grading colour, unless you are a Superstar or a current Championship holder, when the roof must be painted accordingly. Any signage on the roof does not exempt you from not painting the whole roof.
- Sign writing must be professional and be approved by the Promoter.

# 27. SUN VISOR

• A Sun visor165mm or 6" in depth must be fitted with your name written upon it.

### 28. FIN PLATES

• Fin plates must be fitted above the roof line but they should not be larger than 305mm or 12" by 559mm or 22" wide.

### 29. DOOR NUMBERS

• 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.

# **30.** SPECIFICATION & 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.

The <u>Malcom Girling Rule</u> may only be used on championship races which covert a roof grade e.g. World Championship. This is when a car has deliberately been taken out by breaking the rules of racing within the last 3 laps of the race e.g. a car coming off the infield to stop the leader. If the Steward Of The Meeting decides that the Malcolm Girling has come into effect the result shall go back to when the offence occurred and the leader of the race at that point will become the winner. The Malcolm Girling rule only applies to the driver leading the race.

# 31. ROOF GRADING

Grades are to be displayed via the car roof fins and not the roof itself.

The fins must be as follows:-

- White Grade Black numbers on White background
- Yellow Grade Black numbers on Yellow background
- Blue Grade White numbers on Dark Blue background
- Red Grade White numbers on Red background
- Points Champion Black numbers on silver back ground

The rear of the fin plate must be plain and white in colour. *The roof Fin must be above the roofline*. The roof of a car may display a championship status providing the driver is the reigning champion e.g. World Champion, Southern Champion. No sign writing is permitted on the roof of the car displaying previous championship history which is no longer current e.g. the 2015 National Champion cannot display the fact of this in 2017.

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. Multi-Champions will start next to the National Points Champion.

Red grade drivers will start in points order with the lowest points scorer in attendance within the red grade at the front of the respective pack.

Drivers with the incorrectly shown grade, after the points chart has been issued, will have to start at the rear of the grid.

Grid Line up / Roof Order:

National Points Champion National Points Leader Supreme Silver Roof Silver Stripe Red Blue Yellow White

All roof grade champions must start from the rear of the grid. The only exception to this rule is where time trials, or specific grid orders, are implemented. Any of the champions, racing together, should start in order, as listed e.g. National Points Champion at the back of the grid, etc.

# **32. RACE RECEIVER**

- All drivers MUST use an official Race Receiver.
- Any driver whose Race Receiver is not working when forming the grid prior to a race will not be allowed to race, unless it can be repaired before the race start.
- It is strongly recommended that you carry a spare battery either in your overall pocket or taped inside your car.

## **33. TRANSPONDERS**

Transponders are compulsory from 1<sup>st</sup> January 2023. A transponder 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 than the required 1.8 metres will be excluded from the meeting. Transponders can be purchased by calling 01283 575354.

### 34. DATA LOGGING

• No data logging is permitted.

### **35.** SCRUTINEERING OF NEW CARS

All new cars must be Scrutineered prior to its first meeting. Arrangements must be made with Spedeworth to bring the car along to a Stadium on the day of an event and then your car will be Scrutineered.

<u>Spedeworth will be looking to introduce new car models to the formula and would welcome any</u> <u>suggestions on prospective models with similar BHP figures at the wheels to the cars currently</u> <u>competing in the formula.</u>

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).

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

**REVISED RULES FOR 2024 HIGHLIGHTED IN BOLD/ITALIC/RED PRINT ITEMS MARKED STRIKETHROUGH** ARE NO LONGER ALLOWED 2024 1ltr Hot Rod Technical Specifications, Issue 1, Dated 7<sup>th</sup> February 2024.