



# 2024 JUNIOR MICRA STOCK CARS

## SPECIFICATIONS, RULES AND REGULATIONS



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## **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.

Cars, Engines and Fuel will be checked on a random basis.

Violations or any refusal will result in an immediate suspension of all racing facilities.

## **DRIVER REQUIREMENTS**

The minimum age for boys and girls is 11 years old and all drivers will end on their 16<sup>th</sup> birthday.

However, a driver aged from 11-12 may only race under the watchful eye of their promotion, with restricted bookings, until such time as the driver is confident enough to compete fully.

The driver's age must be painted on the passenger side of the car. A copy of the child's birth certificate must accompany their application for a licence.

**New applicants are required to complete a multiple choice written test and a basic driving skills test before a licence will be issued. This is chargeable at £50 and should be arranged with Spedeworth at the time of application.**

**New drivers can start at the rear of the grid and paint the boot lid with a black cross. The Steward of the Meeting will be empowered to ask a driver to remove the cross once he feels that a reasonable level of confidence has been achieved.**

**No newly constructed car is permitted to race without being technically scrutineered, in advance of its first race meeting.**

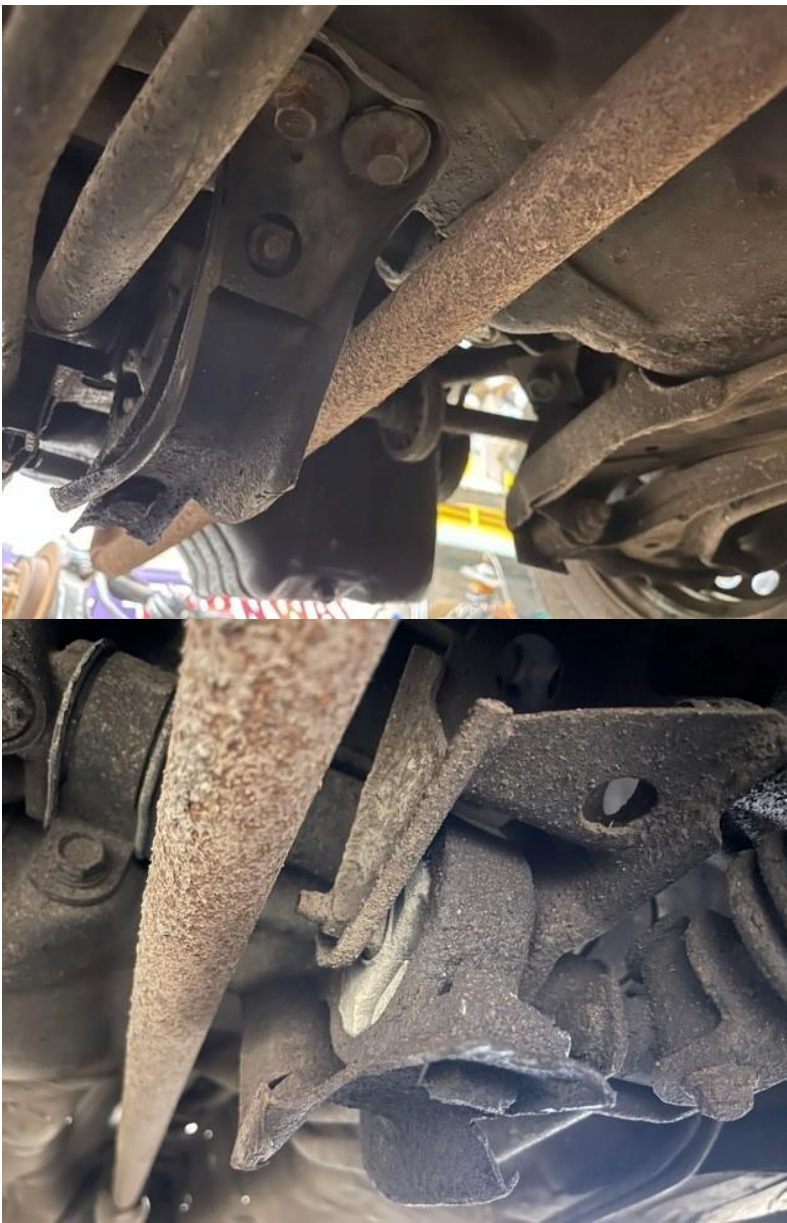
NB: Drivers are reminded that scrutineering checks can be carried out at any time. If parts are suspected of being illegal make sure you leave them with the promotion if you do not agree. If you refuse it will automatically make the parts illegal.

**It is the responsibility of the driver to prove to the promotion that the part is legal by the way of written proof of where the part originated. This must be done within seven days, otherwise the part(s) in question will be deemed to be illegal and will result in immediate suspension from racing and referral for disciplinary action.**

**Only the registered driver or a responsible adult is allowed to drive the car at any time within the confines of the raceway.**

## **1. BODY**

- Only Nissan Micra k11 shells may be used (pre and facelift shells may be used).
- All external lights, fittings and bright metal trim must be removed.
- The interior of the car must be completely gutted of all combustible materials, glass and trimmings.
- Bonnets/wings maybe cut down and welded together to achieve a one piece bonnet
- The doors may be skinned, along with the rear pockets; the doors must be welded shut.
- Outer sills must remain as manufactured. A and B pillars must be retained. From waistline down structural points on A and B pillars maybe removed.
- Door skins (in between the upper and lower side rails) maybe replaced by tin up to a maximum 1.2mm thick.
- Dashboard bracing maybe removed.
- Aerofoils are not permitted.
- The floor pan must be retained and made good, where the internal iron work is joined to the external iron work the body or floor pan must be made good. Inner wings may be removed.
- The boot floor may be removed from the rear panel to within 10mm in front of the panhard rod mount.
- The front inner wings and chassis rails may be removed to the front side of the front suspension turrets.
- The Panhard Rod May be Strengthened.
- You may run a debris shield in the drivers side windscreen aperture, this must be removable and fixed with ties or tape only.
- You may run a debris shields in front of the radiator.
- Front engine crossmember may be cut in front of the rear gearbox mount, the remaining crossmember must still be bolted to the floor pan in the original position and the rear gearbox mount must remain original and in the original position ( see pic )



## 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, which is 850 kg, this has been raised for the additional changes made to steelwork. Racing weight must be achieved without the use of ballast. All internal steelwork must be of equal proportions on both sides of the car in construction and thickness. The driver's floor pan may be reinforced with steel plate maximum thickness 3mm.

The right-hand driver's side weight must be a maximum of 53.0%, at any time – this will be weighed without the driver in the car.

- If you are checked and over the 53.0% but under 53.5% on your first offence you will lose all points gained on the day and receive a final warning. You must have this written in your log book.
- If you are found on a second occasion to be over 53.0% but under 53.5% you will receive a one month suspension, lose all points gained on the day.
- Anyone over 53.5% on their first check will receive an automatic one month ban, and loaded immediately with loss of any points gained (if applicable).
- If a driver is found over 53.5% on a second occasion the penalty will automatically be doubled, or possibly carry a longer suspension. Checks will be carried out at any time.

## 3. ENGINE, GEARBOX & DIFFERENTIAL

The regulations for the 1000cc 16v engine are as follows:

The engine must be standard to the car. No oversized boring of pistons allowed. All engine components must remain standard and must not be interchanged from different models with different engine sizes.

The promoter or another driver/parent/guardian will be able to purchase your engine (bare i.e. head and bottom end) at any point and be removed at the end of a meeting for £250. This is to try and prevent engines being built for large sums of money to create an advantage.

• Only the 34 ICH weber carburettor can be used. The conversion/restrictor plate to mount the carb with an 18mm hole to convert the standard Micra inlet manifold has to be purchased from Spedeworth at a cost of £10. The standard Micra inlet manifold must be used. **Drivers are to be reminded that any tampering with the supplied restrictor plate will automatically attract a 6 month ORCi racing ban.** Inlet manifold servo pipes must either be connected to the servo or blanked effectively.

- No modification to the carburettor allowed.
- You may remove the choke butterfly and linkage
- Throttle linkages may be made to use the standard throttle cable.
- Jets and needles are free.
- Air cleaners are free.
- No trumpets allowed.
- Radiators are free but must stay behind the front bumper and in front of the engine whilst covered under the bonnet.
- ~~Engine and gearbox mountings and bracing are free but mounting plates must be purchased from Spedeworth at a cost of £50 per set.~~
- Gearbox. You may only use the standard 1ltr k11 Nissan Micra gearbox.
- All diffs must be unlocked, no limited slip or power lock types. A remote gear change is not permitted.
- The engine must be fitted with a metal catch tank of 1 litre minimum capacity connected to the engine breather system. This must be fitted under the bonnet.
- You may extend the near side drive shaft or pack the rear of the hub to stop drive shaft breaking or popping out of gearbox.

. At an event the Promoter or Steward Of The Meeting can declare that the ECU can be confiscated from any Junior Micra Stock Car and then allocated to a different driver(s) at any point. This will be overseen by an appointed Spedeworth scrutineer.

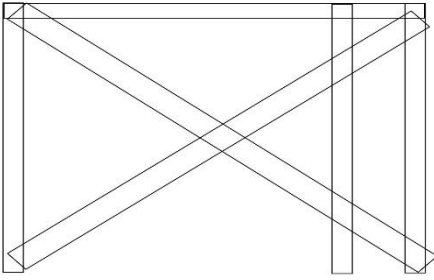
#### 4. ROLL CAGE

• Roll-cage/roof bars/chicken bars and all supports as noted below must be constructed of a minimum 38mm tube (3mm thick) unless stated below.

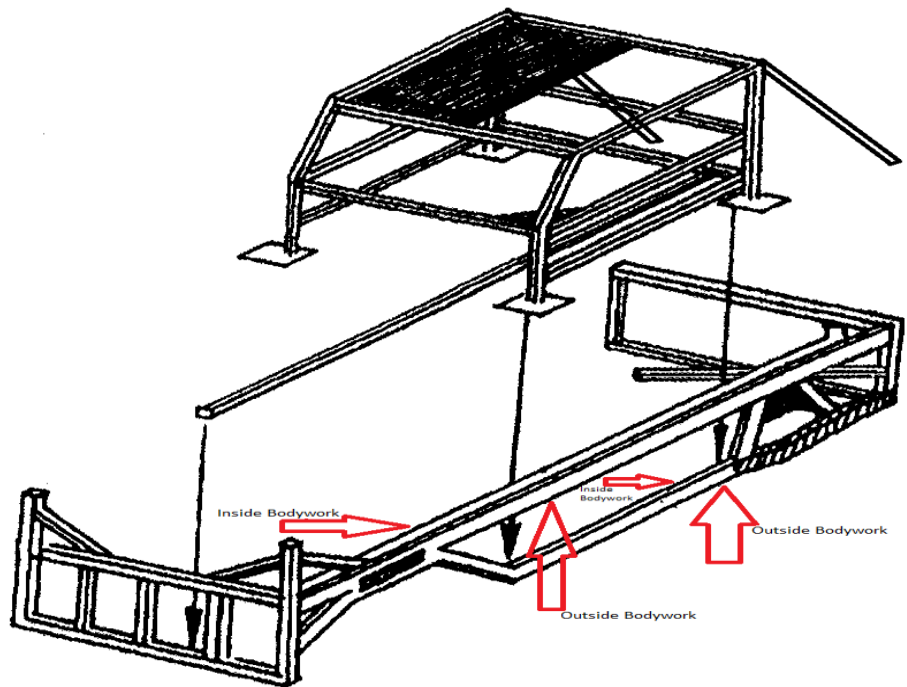
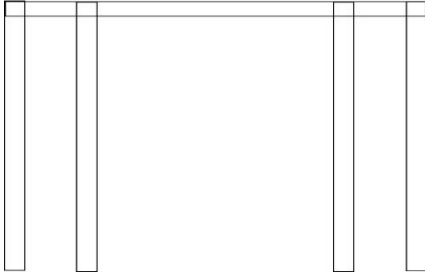
The roof may be removed to aid welding and fitting of the cage, **this must be cut at the 'a' pillars and not across the bulk head. Any cars that have a removal roof that incorporates the bulkhead must have the bulkhead including in bottom of the 'a' pillars welded back in its original position by 1/4/23, This must be a minimum of 3 plates (Left, Centre and Right). These plates must be a minimum of 3mm thickness and 150mm wide and 50mm deep (see pic),** but it must not be lowered or shortened when refitted. The roll cage must be constructed from either 38mmx38mm or 40mmx40mm SHS or CHS, with a wall thickness of 3 to 3.5mm & it must support both the A & B pillars. The cage must consist of the following minimum iron work.



If cross 1 more down bar



If no cross 2 more down bars



1. One front hoop over the A posts.
2. One rear hoop over the B posts.
3. Two **connecting** rail roof bars connecting the A&B hoops, with an additional third **centre** roof bar.
4. **A 3mm plate is to be welded on all four sides on the driver side from centre bar to cover completely the driver side.**
5. The roll cage hoop feet must be welded to four 3mm thick plates 100mm square or alternatively welded to the chassis or internal iron work.
6. There must be one front crossbar at dash height.
7. There must be two crossbars behind the driver, one of which must be at shoulder height to support the seat.
8. Both front doors must have two chicken bars linking the A&B posts.
9. Drivers doors must have a 3mm thick plate welded on the outside of the chicken bars, and may substitute the original outer body panels between the front & rear wheels. Alternatively, if the original outer panels are used the 3mm plate needs only to be a minimum of  $\frac{2}{3}$  of the width of the door, placed centrally between the A&B posts.
10. A metal up-right made from a maximum of 38x38mm or a minimum 19x19mm by 2 to 3mm thick SHS must be welded or bolted to the centre of the front windscreen aperture. Wire mesh is permitted in front of the driver in this area.
11. It is also permitted but not compulsory, to fit a brace off the upper passenger door chicken bar to the dash cross bar. This single bar made of 40mmx40mm by 3mm thick SHS must go no further back than the centre of the front passenger door window aperture.
12. A single bar of 40mmx40mm by 3mm thick SHS may be fitted from the nearside front lower bumper iron to the rear roll cage hoop cross bar. This bar & any connecting iron work must not be above the lower door chicken bar inside the confines of the roll cage.
13. Corner gussets of 150mm triangles are permitted but there must be no overlapping of the gussets.
14. Any part of the cage coming in to contact with the driver must be padded.
15. Additional bracing at the base of the **A&B** hoops are required. These must be made of a minimum 32mm CHS/SHS x 3mm thickness ( pics attached )
16. It is required that additional iron work is added to the top of the driver's door panel between the **A&B** hoops and braced down to the top inside side rail to add driver protection, These must be made of a minimum 32mm CHS/SHS x 3mm thickness
17. The rear down bars may be braced down to the lower iron work to enable further support



## 5. STEELWORK

Steel bumpers/side rails/under rails must be constructed from 40mm x 40mm x 3mm SHS to ensure even contact between cars. **All steel must remain hollow i.e. no ballast of any kind is permitted. The car must be symmetrical in construction side to side.**

- The front and rear bumpers must consist of two horizontal bars, with either four or five vertical uprights. The height of the front bumper, measured between the top of the top bar and the bottom of the bottom bar must be a minimum of 240mm and a maximum of 260mm. The curve at front and rear corners of bumpers must not extend more than 150mm from the line of the side rail. Corner gussets up to 150mm of triangular 6mm thick plate may be fitted.
- You may weld diagonal bars between the side rail and the front bumper.
- Side rails, internal and external, must not be seam welded. A gap between the two rails is not mandatory; however, should the rails have a gap between them, they may be joined at intervals in a ladder fashion.
- Sump guards may be fitted but must be securely welded to the ironwork.

- All cars must be a maximum width of 166cm at widest point not including front rubbing iron. Maximum length from front to back is 370 cm.
- ~~The side rail should measure between 260mm & 300mm from the top of the side rail to the bottom lip of the rear window.~~
- The minimum height from the ground to the top of the drivers side top side rail, the full length of the car is 580mm
- A rubbing iron is permitted welded to the passenger end of the front bumper made of 40 x 40 x 3mm SHS.
- Additional ironwork is permitted inside the car but it must not go "straight through" there must be a break of 150mm or 6" front to rear by either stepping, diverting or angling the iron work.
- Additional bracing may be added to front and rear lower wishbone / link arm mounts from iron work but must be in the original position and as an extra, not to replace existing mounting points



## 6. WHEELS & TYRES

- Only standard Nissan Micra 13" steel wheel to a maximum of 5" width may be used. No wheel spacers allowed.
- All wheels must be the same offset.
- Only the 175/70/13 Pace pc50 tyre may be used.

## 7. SUSPENSION - FRONT

- Suspension components must remain standard.
  - The only shock absorber permitted for use is KYB, part number 632080 (NSF) and 632079 (OSF). Manufacturers' markings must not be removed. You may remove the brake line tabs and use either shock on either side
  - You may lengthen the near side track control arms and must be purchased from Spedeworth. Price £65 for new arm
  - All suspension parts must be mounted in the original position and must not be attached to any additional ironwork unless stated. All cars must have suspension movement up and down.
  - Drive shafts may be lengthened up to 25mm or spaced to prevent drive shafts popping out on impact.
  - Ride height will be measured on the driver's side between the floor and the seal
  - The steering rack may be lengthened, near-side only up to 20mm, or. The repositioning of the near side front top shock absorber mounting is not allowed.
- Front Anti Roll Bars Must Be Removed.

## 8. SUSPENSION – REAR

- The only shock absorber permitted for use is KYB part number 443255. Manufacturers' markings must not be removed.
- All suspension parts must be mounted in the original position.
  - 2" tube may be welded to the axle and shell to locate/fix 2 ¼" spring in place.
- Rear Anti Roll Bars Must Be Removed.

## 9. FUEL SYSTEM

- A full firewall must be in place between the driver and fuel tank and engine bay, with all holes blanked off. Where additional internal panelling is used, these should be detachable to allow full visible access.
- Only tanks with a maximum capacity of 2 gallons are permitted, these must be fitted inside the boot area where they are separated from the driver and securely mounted. All tank filler caps must be of metal and screw fixing.
- Petrol pipes must be of metal or metal covered and have a shut off tap within easy reach of the driver. All tanks must be fitted with a breather system which prevents spillage if a car is inverted. All petrol pick up pipes must draw through a stand pipe from the top of the fuel tank.
- Electric fuel pumps can be used in place of the standard manual pump but they must be situated in the boot behind the fire wall. 4 x 50mm holes must be drilled at the lowest point under the fuel tank to allow spilled fuel to drain.
- The use of in-line fuel pressure regulators is allowed.

***A one-way valve must be fitted to the over flow pipe from the tank.***

## 10. FUEL

For the full fuel specification please see the separate sheet.

## 11. BATTERIES & ELECTRICAL

Batteries must be securely clamped in place behind the driver with a leak proof material to prevent spillage of acid. An electrical cut/off switch must be fitted to the R/N/S corner of the car & this switch must kill all the power to the car when turned off. If a car is fitted with an electrical fuel pump, a switch must also be within easy reach of the driver. Self starter motors must be fitted and in working order at all times.

## 12. BRAKES

- Brakes must standard Nissan Micra and be effective on all four wheels. A handbrake must be fitted and in working order.
- Brake servos must be fitted as standard
- . No Vented brake discs allowed.

## 13. STOP/BRAKE LIGHTS

Not permitted.

## 14. RACE RECEIVER

All drivers MUST use an official Race Receiver. These will come into effect from 1<sup>st</sup> March 20.

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.

## 15. SEATS

Competition type seats are permitted and must be securely fitted. The back of the seat must be adequately supported and provide a strong head restraint otherwise this restraint must be an integral part of the roll cage. Drivers seats may be moved up to 75mm from original position towards the middle of the car. A 75mm x 6mm flat plate shaped to the seat at shoulder height and welded to the roll cage must be fitted as support for the seat.

## 16. NUMBERS

Numbers must be displayed on both side of the car and also on a roof fin plate. Regulation side numbers must be 12" high in 2" strokes. Regulation fin numbers must be 9" high on 1½" strokes. All numbers must be of professional appearance, painted black on a minimum white background of 2" Only.

**Aerofoils are not permitted.**

## 17. SIGN WRITING

The driver's name must appear plainly on both sides of the car. Only other writing confined to sponsors or mechanics names. Childish drawings are not permitted. The driver's age must be painted on the side of the car above the number.

## 18. ROOF COLOURS

**Effective from the 1<sup>st</sup> January 2022 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..**

## 19. EXHAUSTS

An exhaust/down pipe conversion plate must be purchased from Spedeworth at a cost of £20 so that a down pipe can be made from 32mm OD tube, silencers are free and must terminate in front of the back axle. They must also comply with the exhaust noise regulations.

## 20. SAFETY EQUIPMENT

Please visit the ORCi website [www.orci.co.uk](http://www.orci.co.uk) for current safety equipment regulations.



## 21. GENERAL RULES OF RACING

Each driver is only permitted one car per meeting, and each car is only permitted one driver per meeting. **A responsible adult must be present at each race meeting with a Micra Stox driver.**

### Contact Racing :

Drivers may only use *limited* enough force to push a car off its line, or spin a car towards the infield. The following are not allowed: deliberate or forceful fencing, side swiping or *spinning a car towards the racing barrier*.

New drivers can paint the boot lid with a black. This will mean that other drivers may not make contact with them, and that they will not be allowed to make contact with other competitors.

The Malcom Girling Rule 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 / a car giving a 'head-on'.

This does not include a lapped car taking out the leader providing the manoeuvre used is within the permitted rules of racing. 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.

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

***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).***

## 22. SPRINGS

Springs are free to a maximum poundage of 350lb. 2 ¼" springs are permitted.

## 23. RIDE HIEGHT

A minimum ride height measured from the ground to the sill against the rebate lip is 140mm on the driver's side and must be the whole length of the sill.

## 24. DATA LOGGING

No data logging is permitted.

Additions and changes may be made to the rules at any time for the good of the formula to ensure close and fair racing.

**REVISED RULES FOR 2024 IN BOLD/ITALIC/RED PRINT.**

**ITEMS MARKED ~~STRIKETHROUGH~~ ARE NO LONGER ALLOWED**

**2024 Junior Micra Stock Car Technical Specifications Issue 2, Dated 13<sup>th</sup> February 2024.**