

2020 BRISCA MICRO STOCK CARS

Technical Information & Procedures



BriSCA Micro Stock Cars are an introductory junior class of short oval motor racing. The aim of BriSCA Micro Stock Cars is to offer a fun way for young drivers to start racing and learn track craft. Racing should be enjoyable fun; where there is little emphasis on intense competitiveness.

To ensure there is no competitive advantage to be gained, the car must remain as manufactured by BriSCA F2 and all parts on the cars must be as supplied through BriSCA F2. The tight control of the formula is in place to ensure an even playing field, to guarantee the emphasis remains on fun, and not competitive advantage and expense, to ensure this keeps the formula cost effective. To guarantee this is achieved all items must be supplied through BriSCA F2 with the exception of rose joints, drive belts and bearings.

Teams that wish to win at all costs, or who don't subscribe to how the formula is controlled, or who feel that winning is everything are not welcome in this formula.

By signing the current licence application form on behalf of your child, you are agreeing to abide by the technical specifications/procedures herein. ***BriSCA F2 reserve the right to refuse any application without recourse.***

BriSCA Micro F2 have the right to add, modify or alter any rules herein for Health and Safety requirements. Teams and Officials will be notified of any changes immediately. BriSCA Micro F2 are members of the ORCi and are bound by their rules and regulations.

FROM 1 MARCH 2017 NO NEW CARS MANUFACTURED IN NORTHERN IRELAND ARE PERMITTED FOR REGISTRATION/GENERAL USE IN ENGLAND/SCOTLAND.

VIOLATIONS

When referring to the these technical specifications regarding any items such as engine, mechanical or construction, 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, no matter how irrelevant you may feel it is.

Violations or any refusal of a scrutineering check may result in an immediate suspension of all racing facilities. Scrutineering checks, on any item such as fuel, engines, exhausts, air filters, can be carried out at any time. If parts are suspected of being illegal you must leave them with the promotion if you do not agree. If you refuse it will automatically make the parts illegal.

Arrival is expected no later than one hour before the published start time for a meeting, to enable safety checks to be carried out. Should you not be there in time you may be precluded from taking part in your first race.

A scrutineer will be appointed by BriSCA F2 and their word will be final in the conjunction with the Steward of the meeting. Time will be given for the Team to correct any fault, but if any serious breach of regulations is found to have occurred, the car will not be allowed to race at that meeting.

Always make sure that you have your licence/log book with you at every meeting. Faults will be noted in your log book, and it is your responsibility to make sure these are rectified.

Pre-meeting scrutineering is more about safety checks. Just because a car passes, it does not mean it is technically legal. The car may not be raced again until the technical issues have been resolved.

BriSCA Micro F2, and/or any affiliated promotions have the right to disqualify any driver, mechanic or associated member of their party contravene the ORCi Rules of Racing. Please note this also covers all social and media type networks.

If a driver is seen to be making any kind of offensive hand gesture of any type towards another driver/team, or Officials on track or in the pits, will automatically be loaded, and an immediate suspension from all racing may be put in place.

It is a condition of the driver's licence with BriSCA F2 and car registration with BriSCA F2 that they must only compete at BriSCA F2 sanctioned events. Anything outside of this will see the car prevented from being re-registered for use for the remainder of that calendar year, plus one year. The same will apply to any BriSCA F2 registered driver.

If any Team is found in violation of the rules and regulations, a yellow card will be issued, which is a warning. If a 2nd yellow card is issued, this then becomes a red card, which is automatically a meeting ban, or worse.

INTERPRETATIONS OF THE RULES

If the technical scrutineer feels that someone is interpreting the rules, to try and gain an advantage in any way, then action will be taken. Unless these rules state you can do it, you CANNOT DO IT. It is the Team's responsibility to make sure their car is legal "it was like that when I bought it" is not a valid excuse.

It is the responsibility of the parent/guardian to prove to BriSCA F2 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.

1. DRIVER REQUIREMENTS

- The minimum age to compete is 7 years old and all drivers will end on their 11th birthday.
- New applicants are required to complete the ORCi Junior Competence Test, which includes a multiple choice written test and a basic driving skills test before a licence will be issued. This maybe chargeable at £50 and undertaken with one of the following promotions:
- Scotland: GMP - Cowdenbeath/Crimond Raceway to be arranged direct
- England: Incarace, Autospeed – Taunton, to be arranged via Booking Officer.
- This is not permitted to be done on a race day.
- New drivers will be deemed to be 'ROOKIE' drivers for up to their first THREE meetings and must start at the rear of the grid. It is advised that they display a black cross on a white background (minimum size 200mm square) on the rear of their car during this period.
- ***If a driver appears to be excessively slow or lacks in basic driving ability or confidence and seems to be a danger to themselves or other drivers/officials they may be asked to re-sit their ORCi Test, or their licence may be suspended until proof of extra practice sessions have been undertaken before being allowed to race.***
- Drivers are not permitted to race in another junior class (at the same time) that is open to drivers up to 15 years old.

2. THE CAR

- All BriSCA Micro Stock Cars (here on in referred to as the car) must be manufactured by the BriSCA F2 official supplier ONLY.
- Cars are manufactured to strict specifications and all parts must remain as ex-factory condition.
- The chassis must not be altered in anyway, for example no twisting or realigning.
- The chassis must remain in its manufactured form. No ballast permitted. All RHS/SHS/CHS steel must remain hollow. Removal of any steel work such as structural cross braces is not permitted.
- All chassis are supplied with an official VIN plate which is located on the very front of the chassis facing the front bumper as circled in the photo. This remains on the chassis even if the car is sold to a new owner.
- One car only is permitted to be registered to any given licenced driver in any one season. A Team may with the agreement of BriSCA F2 register a second car in their name. (maximum of 2 cars) but there can be no swapping of cars during a meeting, and only one car can be presented for scrutineering (which must be the car that is being used for racing).
- It is not permitted to hire out your registered car, and there are no day licences issued.
- If a car is purchased secondhand the chassis VIN plate needs to be re-registered to the new owner, via BriSCA F2, and a fee applies.
- The chassis VIN plate must be registered with BriSCA F2 to one driver only. Failure to do so will prevent that particular chassis from being used.



- The following maybe replaced or updated without requirement for BriSCA F2 to carry out the repair; panelling to include cab sides, steel cab floor (min 2mm thick), steel cab sides (min 1.2mm thick), wheel guards.
- The addition of flared sides or scoops to the bonnet are only permitted by prior agreement with BriSCA F2. Should the scoop unduly obstruct the driver's view, it must be removed and the scrutineer's decision will be final. If approval is granted the original bonnet must not be cut in any way to accommodate such items. A front aerofoil may be fitted, but must be approved by BriSCA F2, or at the scrutineer's discretion.
- The original bonnet front steel hoop (as supplied by BriSCA F2) must be used and in place at all times.
- Cars that need major repairs that involve repairs to mounting points, roll cages or main chassis must have these done by the authorised BriSCA F2 supplier.
- All bolt on items must be supplied through BriSCA F2 to include; wheels and tyres, 22 teeth taper centre pulleys, front hub bearings, throttle cables, batteries, front stub axles, front axle, front hubs, steering rack, exhaust, rear axle, rear wheel hubs, sprocket, fuel tank, clutch (max torque or Chinese copy), brake disc, brake calliper, master cylinder, front bumper and rear bumper. All items must remain as supplied. Certain items will be tagged, stamped and checked at all times.
- The cab floor must be constructed from a minimum of 2mm thick steel plate. It must extend rearwards from the firewall beyond the point at which it overlaps in a vertical plane (across the entire width of the car) with the transverse front edge of the driver's seat. The cab floor must cover the full width of the area between the chassis rails along the floor's entire length.
- The cab floor must be welded to the chassis on all sides but does not have to be seam welded.
- No drilling or lightening of any **mandatory** panels or the chassis is permitted.
- **All panels, mandatory or non-mandatory must be constructed of a minimum of 1mm thick aluminium. This includes extra panels such as chain guards, shale guards etc. From 1 March 2020 all panels must meet this specification.**
- The following panels are mandatory:
 - Bonnet, cab side panels (waistline up), rear cab panel, footwell side panels, lower chassis rear panel (main chassis to bottom of undercarriage).
- **Any panel repairs i.e. holes or damage must be undertaken with minimum 1mm thick aluminium.**
- **If extra cab sides are fitted, they must be made to allow easy access to enter and exit the car at all times (scrutineers discretion).**
- The nerf rails maybe closed in, particularly to protect the drive gear, and this is free. The nerf rail must be supplied by BriSCA F2 and they must not be offset.
- All engines must be bolted to the left hand side with no internal belts and cannot be mounted centrally in the car from the start of 2019.
- Front and rear bumpers must be supplied by BriSCA F2 only and constructed from RHS 50mm x 25mm with a 2.5mm wall thickness. It is permitted to repair the bumper by means of welding, and/or using up to two steel plates on one bumper, maximum 3mm thick, maximum size 100mm x 50mm. The plates are to repair the flat face of the RHS. No extra strengthening is permitted. You are permitted to replace the bumper stays/braces with new ones supplied by BriSCA F2. Bumper hoops must be 16mm solid bar, as per original. Scrutineers reserve the right to class a bumper as being excessively repaired and it will not be permitted for use.
- A secondary hoop under the bumper is permitted, but this must be identical to the hoop on the top of the bumper (16mm sold bar). This hoop must be supplied by BriSCA F2.
- Rear bumpers maybe bolt on, but must be securely attached with minimum M8 bolts.
- The under carriage below the rear axle mounting points maybe removed (as show in the diagram opposite) to allow easy axle removal. However, if this modification is made, then the piece of tube removed must be welded to a piece of flat steel



minimum 2mm thick and 30mm wide and bolted to the chassis below the axle mounting points with minimum M8 bolts. Alternatively, a piece of flat steel minimum 5mm thick and 30mm wide can be bolted in the same manner. If both sides of the undercarriage have been cut in this manner, then both sides must have replacement plate bolted in as described.

- Two steel tube down bars, each side of the car, connecting the outer edge of the nerf rail to the lower chassis are mandatory and are made of 21.3mm tube with 3mm wall thickness.
- To increase protection to the driver's footwell it is required as a minimum to add a horizontal bar made of 20mm x 20mm (2mm wall thickness) to each side of the footwell to make an 'H'. It is required to fit an extra vertical upright on one side to achieve this, which has a minimum specification of 25mm x 25mm (2mm wall thickness).
- Alternatively, a 2mm thick steel plate can be attached both sides, to the inside of the footwell. This must cover the entire aperture and be bolted (~~for 2018 only~~) or welded in place. If the former, then it must be bolted on each side with a minimum M8 bolts.
- No aluminium rose joints.
- All cars (complete with race wing) must weight a minimum of ~~207kg~~ **206kg** at any time without the driver. The car must always achieve the minimum weight; the adding of fuel or any other liquids is not allowed to achieve this minimum weight.
- If a car is required to add additional steel to achieve the above, then this must be done by adding steel plate to the cab floor only. This must be securely welded in place (must not be removable) and must be mounted symmetrically in the car.

3. ENGINE & DRIVE GEAR

- The engine must be supplied direct from BriSCA F2. This is supplied fully sealed and de-governed. All engine seals must remain intact at all times.
- The only engine permitted for use is the electric start PD170 engine or the Launtop LT210 running either a $\frac{3}{4}$ " , 19mm or 20mm shaft. The car must be able to self start at all times, otherwise it will not be permitted to race.
- If a seal is broken the engine must be re-dyno tested before it can race again at the owners expense. If you require a starter motor or coil pack to be changed you must inform BriSCA F2 and a replacement seal will be added at your expense. The engine maybe required to be re-dyno tested at your expense.
- No modifications shall be permitted in any way whatsoever to any part of the engine or exhaust. This also prohibits the removal of the internal charging system.
- Engines may be removed for stripping at any time. If the engine appears to have been tampered with in any way the owner will have to stand the expense of the strip down and will be subject to disciplinary measures. All owners may carry out a basic service such as changing plug, oils & filters, valve springs (BriSCA F2 only), and setting tappetts, other than that, nothing may be done to alter or modify the engine in any way whatsoever unless it is specifically stated within these regulations.
- The only spark plugs permitted are the NGK BPR6ES or NGK BPR5ES which must not be modified in any way.
- The Emulsion Tube and Jet must remain as dyno tested.
- The only clutch permitted is a 10 tooth, $\frac{3}{4}$ " shaft dry centrifugal clutch (MaxTorue or Chinese copy) as provided by BriSCA F2. This must remain unaltered for example, no spring changes.
- The only pulley permitted is a 22 tooth pulley on both the engine and clutch shaft.
- The 62 teeth steel rear sprocket is only available through BriSCA F2.
- No other ratio sprockets or clutches shall be permitted.
- A suitable steel or aluminium chain guard must be fitted. This must adequately cover the rear sprocket/chain. The scrutineers decision will be final in determining if the guard is sufficient.
- A 2000 8m drive belt is the only belt permitted for use.
- Drive belt tensioners maybe fitted, however if they are, their fitment must be sufficient not to work loose under load.

- An engine may be removed at any time in front of a BriSCA Micro F2 Official only, where the BriSCA donor engine will be supplied, and has to be fitted for the following meeting, while yours is being checked. If all found to be legal, it will be swapped back over at the earliest convenience.
- The plastic air filter cover box must remain in place and must not have any additional holes. All air filters and covers must remain as standard type, bolted tightly and not offset in anyway.
- The rear axle must be solid steel as provided by BriSCA F2, and drive must be provided to both rear wheels at all times. The rear axle bearings may be mounted on either the inside face or the outside face of the chassis. Relocating, slotting or enlarging rear axle bearing mounting points is not permitted. The rear axle must sit centrally and level in the car.

4. ROLL CAGE

- The rollcage and all supports from the chassis up must remain as originally fitted.
- All cars are required to have a steel side plate fitted in both cab sides between the tubular connecting bars. SEE PICTURE FOR AREA CIRCLED. These must be constructed from steel plate no less than 1.2mm thick and welded on both the vertical sides and the top.
- Furthermore a steel plate minimum of 1.2mm thick must be welded on all sides into the back of the lower half of the cab. This must occupy the full width between the two vertical roll cage pillars, the horizontal cross member and the chassis.
- The roof plate thickness must be a minimum of 1.6mm and must remain as manufactured, being welded on all four sides.
- Older cars are required to add either an additional centre roll cage pillar in the area behind the driver's seat (33mm tube x 3mm wall thickness) or two rollcage braces (min 26.9mm tube x 2.5mm wall). It is also acceptable to mount a steel plate to the roll cage (minimum thickness 3mm) to prevent direct contact with driver's seat on a rear impact.



5. Roof Wing

- All cars must run a top mounted roof wing, as noted below:
 - "F2" Style wing as supplied by BriSCA F2 only.
 - Standard folded wing supplied by BriSCA F2.
 - Tilting shale wing supplied by Mark Woodhull only.
- All wings must be mounted (and fixed securely at all times) over the cab and centrally on the car, so that it does not sit more over one side of the cab than the other. No extended roof brackets are permitted; the wing must be mounted as original BriSCA F2 manufacture, which is a maximum height bracket of 70mm from rollcage for a standard folded wing, **and 120mm for an F2 type wing.**
- Wings are not permitted to sit lower than any part of the rollcage.
- All wings MUST cover 95% of the roof plate. If any wing is deemed not to be fitted as per manufacture, the Scrutineer's decision will be final.
- The wing must have no more than two side plates and one centre section. No double decked or extra centre sections permitted or slanting of side panels.
- **Shale wings are only permitted to be used on shale only.**

6. WHEELS & TYRES

- The only tyre permitted for use is the WANDA 18 x 8.50-8, 4ply PART NUMBER P509 as supplied by BriSCA F2 and will be marked and stamped accordingly.

- **All tyres must have visible lines of tread across the whole width of the tyre a minimum of 2mm deep.**
- Balancing of wheels, and wheel weights are not permitted.
- All identification marks must remain on tyres. No tyre flaps allowed. Buffing of tyres is not allowed. Tyre softener is not allowed.
- **Any tyre suspected of being buffed will be confiscated, and disciplinary action may follow.**
- Tyres must only be filled with air (no nitrogen) and must not be re-grooved.
- The only wheel rim permitted is the steel rim supplied by BriSCA F2 and this MUST remain unmodified. No wheel spacers permitted.
- All wheel nuts must be in place for racing.
- Steel wheel guards protecting both rear wheels, as fitted as standard are compulsory. Both rear wheel guards must be present at all times and bolted at both ends and securely fixed tight. No aluminium wheel guards permitted.
- **The wheel guard must not protrude more than 420mm from the chassis rail.**

7. SUSPENSION & STEERING

- Suspension/steering components must remain as supplied by BriSCA F2.
- Suspension/steering mounting points must not be altered in any way.
- No offsetting/tilting of suspension is permitted beyond that which is allowed via adjustment of the rose joints and mounting bolt. All suspension components must remain symmetrical on the car e.g. the rear axle must be mounted centrally in the car on a horizontal plane.
- The steering column only may be modified or repositioned to suit the driver, **but must remain in a central position. You may fit a spline or an additional UJ.** Quick release steering wheels are permitted.

8. FUEL SYSTEM & FUEL

- The only tank permitted is the one supplied by BriSCA F2 as pictured right, with a modified neck/cap and breather pipe outlet with non-return valve. This tank MUST be obtained from BriSCA F2. However, early original screw type filler cap tanks are permitted to still be used if fitted originally on the car.
- ~~Prior to 1 June 2019, if the petrol filler cap is not a screw in/threaded type, it is compulsory to use a filler cap fitted with a non-return valve as supplied by BriSCA F2.~~
- A full and complete firewall as supplied with the car, must be in place at all times.
- A heat shield made from minimum 3mm aluminium or special heat shield deflector has to be fitted in front of the fuel tank as pictured. It must be positioned as shown, to go from underside of bonnet to below tank. It must be a minimum of 250mm wide by 160mm high.
- For the full fuel specification please see separate sheet. Note: no fuel additives of any type are permitted. Random fuel samples will be taken.



9. BATTERIES & ELECTRICAL

- An electrical cut off switch must be located within reach of the driver on the dash and must be marked on/off with an ORCi Isolator Sticker. This must be in full working order and all times
- Batteries must be securely clamped and bolted in place under the bonnet and need to be covered with an isolated material i.e. rubber. Should the battery be located in the driver footwell it must be completely enclosed.

- Batteries must be fully charged and in full working order at all times.
- Gel type batteries are permitted.

10. BRAKES

- The braking system must remain as fitted, in full working order with NO modifications whatsoever permitted. Single steel disc on the rear only is permitted – these maybe solid or drilled but no vented discs allowed.
- No floating discs permitted, they must remain fixed at all times. The application of any liquid on the disc is not permitted.
- You may alter the brake pedal to suit the driver, however all pedals must be on the right hand side. **No left foot braking.**
- *It is only permitted with prior approval to move pedals forwards to facilitate greater leg room. If so a suitable firewall to the satisfaction of the scrutineer must be in place.*

11. SEATS

- A high back full containment type seat must be fitted. It is highly recommended that the seat is fitted as per manufacturer's recommendations and that the seat mountings adequately hold the seat. Consideration should also be given to head clearance.
- The seat at shoulder level must be bolted (minimum M8 bolts) and fully supported by a tubular steel hoop/bar or bars to prevent any rearward collapse of the upper part of the seat, otherwise this restraint must be an integral part of the roll cage.
- It is also advised to bolt the very top of the seat to the rollcage.

12. SAFETY EQUIPMENT

- All safety equipment must be of a minimum standard as directed by the Oval Racing Council – see separate document.
- Visor or goggles are mandatory **and must be worn at all times.** Additional Roll offs/tear offs for shale are mandatory.
- Only one internal mirror maybe fitted, on the inside of the cab. Maximum 100mm x 100mm. No external mirrors.
- Raceceivers must be worn at all times, including up to one hour before start time. Communication with a driver is only permitted via the Steward or Race Organiser. Units will be available for hire at £10 per meeting.
- Raceceivers are there to aid a driver, and drivers must still be aware of any on track incidents and not to depend solely on radio communication. It is the Team's responsibility to make sure they have suitable ear phones - "I couldn't hear" will not be an acceptable excuse. If a driver cannot clearly hear any radio communication they must retire to the infield. See separate Raceceivers Leaflet.
- A minimum of 2kg dry powder Fire Extinguisher must be carried in your transporter and it must be at hand when refuelling as per the ORCi Safety Specification Sheet.

13. TRANSPONDERS

- An AMB transponder for lap scoring is mandatory and must be working at all times. Units will be available to hire for £10 a meeting (depending on availability on the day). The following are permitted: Tranx 260 direct powered or rechargeable (red), Tranx 160 rechargeable (yellow) or X2 rechargeable or direct powered.
- It maybe fitted anywhere on the car, however it must be as low as practically possible for the best signal.
- The purpose of the transponder is to aid tracks particularly with larger grids of cars in lining cars up under race suspensions etc. Race results, timings etc will not be made available online or at the tracks.

14. NUMBERS

- Numbers must be displayed on the outside of both roof wing side panels.
- Minimum size for numbers: 175mm high, in 40mm strokes.
- Official BriSCA F2 registered race numbers must be of a clearly visible professional appearance, painted black on a white background or white on a black background. Scrutineer's decision will be final.

15. EXHAUSTS

- Exhaust must be as supplied by BriSCA F2. The only exhaust permitted is designed to run under the bonnet, as per manufacture, no extra bends permitted. This is constructed from 26.9mm diameter (2.5mm wall thickness) steel tube, and must be 480mm in length. No additional tube is permitted after the silencer.
- The exhaust muffler/silencer must be as standard/supplied with the engine. Should the silencer break away from the tube or split apart, it is not permitted to weld this. A new system must be purchased from BriSCA F2.
- The exhaust must be securely and tightly bolted to the engine at all times. If the exhaust is blowing it must be replaced or tightened up on the engine.

16. GENERAL RULES OF RACING

- ***BriSCA Micro F2 Stock Cars are not permitted to race on a circuit with a rope/post style barrier.***
- A responsible adult must be present at each race meeting with the driver. ***They must adhere to ORCi Safeguarding Policy in that they must not be under influence of alcohol or other substances.***
- The formula is strictly non-contact. Your driver will be warned if contact is made. If your driver is consistently being warned, then your driver maybe excluded from the meeting, and further action may be taken.
- Should a driver be passed by cars either on their inside or outside, the driver being passed must hold the line they are on.
- Any driver giving thumbs down, will have to have permission from the meeting Steward or Race Director to continue racing for the remainder of the meeting.
- ***In car cameras are not permitted. This refers to any type of visual recording device, including phones and camera type goggles. Live streaming of events is also not permitted, and you maybe asked to leave the stadium should this occur.***
- There will be no trophies given out for first three places, or other incentives awarded. Sponsored meetings however will see all drivers receiving awards. No points, no roof grades and no championships. No flashing lights permitted.
- Grid groups will be determined by average position finished over the course of the season and ability.
- Some events will have the starting positions within each grid group pre-drawn. Should these be drawn on the day, it is the parent/driver's responsibility to ensure that they attend the draw, otherwise the driver will be drawn at the rear of their group. In all cases race winners must start at the rear of their grid group for the remainder of the race meeting.
- Each grid group requires cars to be lined up two abreast, with cars lined up directly behind the car in front, either on the inside grid or outside grid. All races are clutch start including restarts.
- Should a parent or mechanic be invited onto the racing arena, they must be wearing overalls to the same specification as the ORCi Safety Specifications.
- For bookings to race events, visit www.BriSCAF2.com. Under Micros there is a section noted "Booking in Procedure".

REVISED RULES FOR 2020 IN RED/BOLD/ITALIC PRINT

ITEMS MARKED ~~STRIKETHROUGH~~ ARE NO LONGER ALLOWED

2020 BriSCA Micro Stock Cars

Technical Specifications, Issue v2_20 - Dated 31 December 2019

© BriSCA F2 Limited

This document or any part therein must not be reproduced without prior written permission from BriSCA F2 Ltd