



Welcome to the new BRCA 5th Circuit on road series in the UK. It's hoped that the series will be a great success, supported by all drivers and it will be run/organised by:-

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Technical Inspection- Paul Orman

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The calendar for the 2025 race season is as follows:-

Round 1 & 2 Cotswolds 19th, 20th and 21st April

Round 3 & 4 Halifax 24th, 25th and 26th May

Round 5 Wombwell 28th, 29th June

Round 6 & 7 Brooklands 23rd, 24th and 25th August

Round 8 Wombwell 27th, 28th September

Any Large Scale on road car will be catered for if 5 or more arrive at an event and they can be fitted into the time schedule, but the 3 main classes are:-

Touring Cars 2wd

FG 4wd Mini

FG 4wd 530 class

With a support class of FG 4WD electric.

General Rules-

The overriding rule for anything in this series is to use common sense! If in doubt ask.

All drivers must hold a current valid Brca licence and the driver must show the licence if requested by race control. All Brca safety rules must be complied with, including the maximum weight of any car being 20kg and the maximum length of 1m.

Event entries will be taken and paid for via the BRCA website. The entry fee is £30. Overnight camping costs/availability is down to the host track.

All competitors must have their own personal transponders. It is the responsibility of the racer to ensure that their transponder is working and not for the race controller or race director to adjudicate after the race is finished, we are relying solely on the computer equipment.

Any drivers still using 40mhz radio equipment must liaise with the race controller to ensure there's no frequency clashes. No changes to be made without the consent of the race controller.

Gyro's or any other form automatic/electronic driving aids are NOT allowed in any class.

A drivers best 6 results from the 8 events count towards the championship, 100 points for a win, 99 for 2nd, 98 for 3rd etc, TQ from qualifying will be awarded one extra point. Tied championship positions shall be resolved by comparing the drivers discarded rounds from the championship.

Marshalling

Drivers must marshal one Heat after their own race, unless they have been designated as Referees

or instructed otherwise by race control. All marshals must be BRCA members and have attended the driver's briefing (or at least been asked to).

If a competitor is unable to marshal for any reason then they must provide a suitable substitute. Failure to marshal or provide a substitute in qualifying will result in the loss of that competitor's fastest qualifying time.

Failure to marshal or provide a substitute during finals will result in disqualification from the event. If a driver takes too long to get to their marshal post during the heat change over then this will result in the loss of that competitors fastest qualifying time.

TYRE RULES

Tyres are to be of moulded rubber.

Permitted maximum 1/5th Scale tread widths are: front - 75mm, rear - 80mm.

Tyre additives are allowed (circuit rules apply). Drivers do so at their own risk and the onus of safe use lies with the driver. Tyres that have been treated must not be put on the track when they are visibly wet. Preheating the tyres with electric tyre warmers is permitted.

All tyres must be commercially available for retail sale at the time of use.

ENGINE RULES

The engine must be a single cylinder 2 or 4 stroke piston engine,

Only petrol commercially available from UK petrol stations or Alkylate type fuel (eg Apsen) may be used

No Avgas or specialist racing fuels allowed.

The only additive allowed is 2 stroke oil.

Driver's fuel may be randomly tested by the scrutineer and readings attained must fall within +/- 10% of the average taken on the day using the Digatron fuel tester, or test as standard pump fuel if using a spectrometer. Any fuel tested that falls outside of the tolerance window will be deemed illegal unless the driver can prove it to be legitimate.

Drivers found using additives will automatically face a 12-month ban.

The following are not allowed: performance enhancing gases such as Nitrous Oxide, Fuel Injection, Turbo or Super Chargers, Electronic Ignition systems which run off separate battery packs.

Touring car 23cc engines may be modified internally to any degree except that separate liners are illegal. Heat sink heads may be used together with long reach plugs. Alternative ignition systems may be used providing they are not battery fed.

All engines must be fitted with either a suppresser type plug or suppressed plug cap.

Motor cut-out switches cannot be moved and the relevant side window must be cut out for easy access. It is up to the driver/owner to make sure that the cut-out switch is operative and is in a position that can be easily reached by a marshal/mechanic etc (see 3k). In addition, a mechanical fail-safe must be fitted to the carburettor which returns the throttle to a closed position in case of a broken throttle linkage. (The return spring fitted as standard on most carburettors should suffice).

Engine Cut out Switches for all Classes must be located in the original position on the engine, and the relevant side window cut out for easy access. This position must be marked on the body with an "E" of no less than 20mm in diameter and outlined in Red.

A "one engine rule" applies to the saloon class. Only when the race director declares a meeting "wet" may you change the engine. If any problems occur with the engine, you must report to the scrutineer and then you may repair it, or replace if necessary.

The engine capacity is limited to:-

23cc maximum for touring cars

26cc maximum standard engines for the FG Mini and 530 4wd classes

Electric Starts can be used in all classes, but they can only be used in the pits and pit lane. At no time can they be used out on the track; a car must be recovered back to the pits to be restarted. A 10mm hole is allowed to be drilled in the body for access.

TRANSMISSION

The transmission is a free area with the following exceptions:

Only two-wheel drive is allowed (with the exception of the 4x4 classes) which must be to the rear axle only.

Electronic traction control systems fitted to the car itself are not allowed in any class. Radio control transmitters with traction control programs can be used. Two Speed gearboxes are not allowed.

BRAKES

Cars must be fitted with a braking system that is capable of both stopping the car and holding it stationary whilst the engine is running. Active antilock braking systems using wheel speed sensors are illegal. Radio control transmitters with antilock braking programs can be used.

BODYSHELLS

Please note safety and common sense applies to all bodysHELLS, and the scrutineer's decision is final. All edges on the body especially window cut-outs must be sanded smooth. Repairs or extra reinforcing applied to the body shall be of such a nature as not to cause a hazard. i.e., no sharp metal edges or carbon fibre splinters etc. If a major part of the body is lost during a race, the damage must be repaired immediately in the pit area if ordered by the Race Director. At least one window on either side must be cut out of the body. This is to allow easy pick up of car when marshalling and better access to engine kill switch.

BUMPERS

Saloon cars must be equipped with a foam bumper (Purim material or similar). These bumpers must be fitted as per Efra rules.

All other classes must have a foam bumper with exception of F1 cars must have a foam bumper fitted with as much foam as possible.

CARS PER CLASS

Only one car (engine & rolling chassis) per class per driver will be accepted. The main chassis plate (i.e., the main structural member to which the other components are mounted) may only be changed with the consent of the Race Director. The essence of this is that a car cannot be replaced or substituted once entered into a day's racing.

SAFETY

No refuelling is permitted during racing or practice except in the pits/pit lane. Under no circumstances is refuelling to be carried out with the engine running. Anyone refuelling on the track will be disqualified. There will be no refuelling allowed during any qualifying race or final including warm-up time. Drivers are advised to have a small dry powder fire extinguisher to hand in their pits.

Smoking will only be allowed in a designated area announced at the drivers briefing. Nobody under the age of 14 will be allowed to marshal at meetings.

EXHAUST/INDUCTION & NOISE

In practical terms no driver will be allowed to run with a car in any class making enough noise so as to cause problems for the club on whose circuit the event is being run. Kit Standard exhausts are usually sufficient. Open exhausts or pipes are not allowed. The scrutineer will check for excessive noise.

The complete exhaust system must be kept within the body work of the car and should (where possible) exit downwards. It must be understood by all drivers that any failure of the exhaust during a race or practice will require the car being removed immediately from the circuit until the fault is repaired.

DRIVERS BRIEFING

A drivers briefing will be held prior to qualifying covering all aspects of the event that drivers need to know.

DRIVING STANDARDS

The Race Controllers will generally act as referees and may confer where necessary with the Race Director. If possible two referees will be stationed on the rostrum and penalties will be given that are appropriate to the offence during the race or afterwards as seen fit. Driving or otherwise behaving in a manner likely to cause injury to other drivers or spectators may result in disqualification from meeting.

CONDUCT

Any competitor or pit crew member causing a nuisance or using abusive language to another competitor or pit crew member will face the officials on the day. Appropriate action will then be taken.

RACE MEETING FORMAT & STARTING PROCEDURE

Qualifying will consist of three ten-minute rounds with the best result to count. The race director may decide to have extra practice rounds where possible. If the meeting is oversubscribed heat times may be reduced to 7 minutes. Finals may be reduced in length if necessary. Rolling Starts will be used for all Heats

Finals will be run to 'single sided Christmas Tree' format with 7 direct qualifiers into each final. The fastest 3 from the lower finals will be promoted to the next final The main "A final" for all classes will be of 30 minutes duration.

All other finals will be up to a maximum of 20 minutes.

The Race Director may change the final durations on the day due to timescales and entries.

Finals will be started from an echelon type grid.

There must be at least a 5-meter gap between cars at the start of the final. (Most circuits now have start boxes painted on the circuit at about 5-meter intervals, in which case these will be used).

Mechanics must move back away from the cars at the beginning of a Final when instructed by race control/start marshal.

WET WEATHER DURING QUALIFYING

The Race Director is responsible for the decision to stop a race in the event of rain. On the result sheets the Race Director must mark a heat WET when the heat was raced under wet conditions. Heats are generally considered to be "WET" when average lap times are approximately 20% slower than before due to rain or moisture on the track. When all drivers have had at least one dry heat, all results will be counted. When weather and time permits,

the Race Director may decide to offer an extra heat to those drivers who did not have a chance to drive a dry heat. When not all drivers have had a chance to run a dry heat, only the wet results will be counted. When continuation is judged to be senseless, or when the other drivers should be offered a fair chance to drive under dry conditions, the Race Director may decide to end a heat or cancel a complete heat.

Scrutineering

For all classes it is the onus of the driver to ensure their car comply with the rules. i.e. fuel tanks, weight, width, wings etc. Cars will be randomly checked and penalties may be incurred.

1) Failing technical inspection during qualifying, results in the loss of that drivers best qualifying run. 2) Failing technical inspection following any final, results in the loss of that drivers laps/time for that final and they will be placed in last position in that final. All cars must conform to the safety aspects and any official may carry out these checks. Final decisions will lie with the chief scrutineer.

All cars to be held in 'Parc Ferme' for the duration of the following heat, if possible including a transmitter pound.

Engine/carb/clutch scrutineering for the Fg Mini and 530 classes will take place after their finals, any driver/s maybe requested to remove their engine for inspection under the watch of an official and stripped down. Anything found to be against the rules will result in immediate disqualification from the event (as will refusing to comply with the request). If found to be legal then a new cylinder base gasket will be supplied for.

Touring Cars,

The car body has to comply with the calculated scale dimensions 1:5 with the allowance of using the following tolerances.

Length: within scale +/- 10%

Width: max. 395 mm measured at the widest point of the bodyshell

Height: within scale +/- 10%

Tank capacity: 700 cm³ (including pipes to and from the carburettor and any fittings)

Minimum weight, without fuel: 10.000 g

Maximum weight, without fuel 12.000 g

All 1:5 cars have to be genuine scale in all details and proportions and be a fully detailed model of an existing 1:1 touring and GT race car. If the allowed tolerances are used, then all parts of the model in that particular view have to be within the same sign (wheelbase-, length-, //wheelbase+, length+). Mixtures of car designs are not allowed. Only bodyshells that are approved by EFRA will be allowed and the minimum weight of the body is 550g (ready to race including wing/support under the wing if used and body side guards but excluding any air ducting or other optional parts/braces).

Weights are NOT allowed to be added to the body. They have to be properly fixed to the chassis and must cover the outer edge of the wheels at the centre of the axle when viewed from the top. The side and rear windows may be cut out for cooling. It is not allowed to open them by cutting out only some holes. Also it is not allowed to mould air channels into the

side windows to guide air into the interior. The body shells have to be painted and all windows to remain clear.

All parts of the car have to be covered by the body. Only the radio antenna is allowed to come outside. All openings in the body have also to be in the existing 1:1 race car. It is not allowed to modify the car body by cutting it over the marked trim lines or to widen it by heating it or parts of it.

WING/SPOILER

A single rear wing is permitted as long as it does not exceed the front view profile and the length of the car. The wing has to fit in a side "profile box" measuring 60 mm x 60 mm per side and should not overhang the end of the car. Extension pieces extending past the main end plates are not allowed.

BUMPER

A bumper has to be fitted to the chassis. Bumpers have to be designed in a way that they fill the front of a car body completely and be a minimum height of 40mm. The material used has to be flexible like PU-RIM or other foams, that are used in 1:1 car construction to absorb impact energy. At no point may any part of inflexible material for bodysell mounting protrude from the body more than 10mm. If an opening is created through the foam bumper for cooling air, the combined thickness of the foam (above and below the cooling hole/slot) must still be a minimum of 40mm in height.

TYRES

Rim Diameter max.: 107 mm

Rim and fitted tyre Diameter max.: 136 mm

Rim and fitted tyre width - front max.: 75 mm

Rim and fitted tyre width - rear max.: 80 mm

Only semi pneumatic rubber is allowed. Foam tyres are not allowed.

FG 4 Wheel Drive Sportsline Mini Class,

This class is strictly for 4WD Sports Line FG Mini's, They must be kept totally standard as they come out of the box with no drilling, grinding or altering of the standard components what so ever.

The engines are to be totally standard Zenoah or CY 26cc Engines as supplied by the manufacturer, either 2 bolt or 4 bolt cylinders. Absolutely no modifications allowed, and any replacement parts used during servicing must be genuine manufacturer's standard original parts for the engine.

Spark plugs to be NGK CMR7H Any Commercial Pump Fuel Any 2 Stroke Oil

A foam bumper must be fitted to the front & as long as there is a overhang of foam from the plastic base this is accepted.

No modifications to external or internal shock parts are allowed

Only "W04 XM" dry and "XR" wet range of tyres along with the previous "XS" "S" and "E" range of tyres (which have now been superseded) are allowed to be used on either black or white wheels. No other compounds or slick tyres are permitted.

In the event of a wet race Air filter & servo covers are permitted.

Due to Fuel leakage from Fuel Caps we are allowing any modification to the cap, but the breather must remain standard (Vent pipe from cap to back of the car with no devices inbetween).

Car Weight to be a minimum of 10KG & Maximum of 12KG with empty fuel tank, 4 tyres, battery & Body shell fitted.

The car must be a maximum width of 410mm

Only FG Mini shells are allowed, you must have cut outs in front side windows for marshal pick up & rear side window engine kill switch side, E sticker to be fitted near kill switch on body shell. Only a single 10mm hole is allowed in front screen. Side and rear window cut outs are optional but the window nearest the engine stop switch must cut out to allow easy access.

The only optional exceptions to the above rules are as follows:

- 1) Front Dog bones can be replaced with the FG CV upgraded shaft kit. Part Number: 68415
- 2) Rear Lay shaft brake can have the lined brake pad upgrade kit. Part Number: 08449 or 06039/10 3) Plastic gear holder can be replaced with the Alloy upgrade. Part Number: 07439 4) Carbon Side Guards are allowed in any material. 5) Any servos can be fitted as long as the original mounts & layout are used.
- 6) Any shock oil is allowed to be used to suit car set up. 7) Any FG Shock Springs are allowed, 8) Any battery can be used.
- 9) Front Body mount Kit FG or Similar. Part Number: 07154/02
- 10) Any FG gear ratios can be used but NO Over driven front or rear diff gears.
- 11) 9.5mm Steel Wheel squares can be fitted to front drive train Part Number: 08407
- 12) Bearings maybe replaced with any brand of steel bearings (ceramic bearings are banned)
- 13) The fuel tank cap can be modified or changed but the total capacity of the tank can only be a maximum of 700cc.
- 14) Cars can use the FG M8 axles (and changed to M8 if originally supplied as M6). FG6079/05 15) The plastic ball joints can be replaced with any brand but must remain plastic.
- 16) The clutch must remain standard but the spring can be any colour with a maximum thickness of 2.7mm
- 17) The optional FG steel exhaust manifold is allowed: FG-08114/01
- 18) Fuel and breather pipes may be changed but must follow the same route as the

originals.

- 19) The optional FG small aluminium engine mount: 06485/01
- 20) The optional FG large aluminium engine mount: 66215
- 21) Either the FG Red or Blue servo saver spring is allowed

If your considering buying a new Fg Mini, the Trophy Specification version of the Mini is supplied with all the option parts above already fitted which makes it the cheapest route to enter this class. FG no: 155180TZ

These are quite simple rules, which mean that the car must be totally standard with no modifications to differentials, chassis, engines, exhausts, Air Filters or the standard components etc. There will be scrutineering on all cars prior to racing. If you have purchased your car on the second hand market, please ask the scrutineer to check your car for legality prior to racing as excuses like 'I didn't know, the previous owner assured me it was standard' will not be accepted.

4x4 On Road Cars

The FG 530mm 4wd saloon. The engines are to be totally standard Zenoah or CY 26cc Engines as supplied by the manufacturer, either 2 bolt or 4 bolt cylinders. Absolutely no modifications allowed, and any replacement parts used during servicing must be genuine manufacturer's standard original parts for the engine. , clutch, exhaust, air filter and a touring car body. These cars run to the same basic rules as the Mini class and allowed optional parts listed above but are also allowed these additional options;-

8418	Front bumper kit
4483/01	Front body mount kit
8450/08	Tuning front brake kit
6044/01	Fibre front brake discs
6042/05	Steel rear brake square
68408	One way front diff
68214	POM Rear damper tower
7071/06	5mm rear roll bar

The only tyres allowed to be used in the 4wd 530 class are;- PMT
Supreme Super Soft, Soft an Medium Compounds
PMT Eagle Wet weather tyres
No slick tyres

All vehicles must conform to all the safety regulations.

Electric FG 4WD Support Class

Rules are quite relaxed as this is a development year to allow racers to experiment and the race organisers will make informed decisions for the 2026 championship.

Race format

Qualifying – 3 x 7min

Finals – 2 x 7 min (normally will be 1st and last finals to allow batteries to be charged)

Eligible cars and body accessories required are as follows:

Car –Any FG 510mm or 530mm 4wd on-road chassis, this also includes the latest Black edition.

Bodyshell – Any 510mm or 530/535mm on road bodyshell to suit the wheelbase.

Front Bumper (FG08418)

Front Body Mount (FG04483)

Electrical / Electronic Equipment Requirements:

Battery – LIPO's connected in either series or parallel (or both) to give a maximum drive voltage of 16.8v

All batteries used must be on the BRCA EB Homologation lists;-

2s battery lists- [http s://www.brca.org/racer-hub/equipment-recognition-board/battery-homologation-lists/2279-2025-2s-stick-lipo-list-21-25-v1](http://www.brca.org/racer-hub/equipment-recognition-board/battery-homologation-lists/2279-2025-2s-stick-lipo-list-21-25-v1)

4s battery lists- <https://www.brca.org/racer-hub/equipment-recognition-board/battery-homologation-lists/2278-2025-4s-stick-lipo-list-17-25-v1>

Battery charging procedures must also be followed- <https://www.brca.org/racer-hub/equipment-recognition-board/electric-board-rules/1883-lithium-battery-charging-procedures-clarification-2>

Always check the Brca website for the latest homologation lists along with any changes to battery charging and safety procedures.

Cooling Fans (optional)

Gearing is free for both standard and fine-tooth gears, but the following gearing is recommended for standard gears (14-20-44):

Steel gear wheel 14 teeth (FG66217)

Steel gear wheel 20 teeth (FG06433)

Plastic gear wheel 44 teeth (FG06422)

These are only recommendations.

Car Tuning Options-

Standard cars can be upgraded to the specification of the Black Editions – that is primarily UJ driveshafts, fine tooth gearing and the dampers from the Evo 2020.2 07209

Any FG Spring for 4WD 510 / 530 and any shock oil is allowed

FG 4mm or 5mm anti-roll bars may be used front and rear

Any size wheel squares can be used on the front and rear (width)

Front Dog bones can be replaced with the FG CV upgraded shaft kit. Part Number: 68415

Bearings maybe replaced with any brand of steel bearings (ceramic bearings are prohibited)

The plastic gear holder can be replaced with the Alloy upgrade FG07439

Either the FG Red or Blue servo saver spring is allowed (2.4mm Blue Spring FG68325/01)

Side protectors made of any material are allowed

Mounting plates are allowed to be fabricated and fitted to allow the ESC to be mounted away from the motor and batteries.

Wet weather protection is allowed to be fitted to safeguard electronics

Tyres

Any tyre maybe used (including slicks) from any manufacturer. All tyres used must be commercially available.

OTHER REGULATIONS

If any issues arise on the day (anything including technical rules, organisation/running of the event etc) the committee present at the event can hold a meeting and resolve the problem. The committee also have the power to amend any rule for the good of the sport and fair play between all drivers if for unforeseen circumstances a problem arises.

The overriding theme for the Brca series is fun, and we hope every driver competing in the series has a great time during racing, but if anyone thinks there's something that can be improved or should be changed, just speak to one of the officials and we'll do our best to make everyone happy!.