



## **BRCA 8<sup>th</sup> Circuit IC Construction and Operating Rules 2020**

### **Construction.**

**1.1.1** A car must be an 8th scale character representation of a racing car within the given dimensions. Maximum width of car is 267 mm, this excludes the body shell which has its own dimensional rules.

**1.1.2** The Designated Officials may disqualify any car that, in their opinion, would be a hazard to spectators or other cars.

**1.1.3** All cars must have a de-clutching device and operating brakes capable of stopping the car and holding the car motionless with the engine running. Brakes are only allowed to operate on the rear wheels.

**1.1.4** The minimum weight (dry car no fuel) of car complete with tyres, body, personal transponder and clips is 2.35kg (2350g).

**1.1.5** All cars must be fitted with a mechanical failsafe device fitted to the engine to positively close the throttle in the event of failure.

**1.1.6** Any part of a car may be substituted during a race except the chassis. The chassis may be changed with the approval of the Committee. The essence of this is that a car cannot be replaced or substituted once entered into a days racing.

**1.1.7** The 8<sup>th</sup> electric class must comply there own construction and operating rules.

### **Engines / Silencers / Air Filters**

**1.2.1** The engine displacement must be a maximum of 3.5cc. The engine must be fitted with an adequate exhaust- silencing device, which is contained in the current BRCA 8th Circuit Section Committee approved listing. (This BRCA list is used for reference only and does not imply that any other BRCA rule maybe enforced).

**1.2.2** Exhaust outlets must face horizontally or below. No additional extensions to the exhaust outlets are allowed. Exhaust outlets should be a minimum of 15mm in length (measured from the inside) with a maximum of 8mm inside hole diameter. The silencer must not under any circumstance be modified in any shape or form as supplied by the manufacturer. The manifold (on the other hand) may be cleaned internally only to remove any burrs or obstacles in the pipe, NO cutting and re-welding are allowed to the manifold. Altering the variable length of the manifold can only be carried out by using longer or shorter manifold supplied by the manufacturer

**1.2.3** All cars must be fitted with a suitable approved noise reduction air filter (INS box) at all times. This must always be complete. In the case of wet weather, the race officials will announce when the conditions are wet enough to allow the use of wet weather air filters or the drilling of a 3mm (max diameter) drainage hole in the base of the Ins Box type of air filter (which must be resealed totally in dry conditions). No modifications are allowed to the INS box other than the 3mm drainage hole as stated above.

## **Fuel**

**1.3.1** The maximum percentage of Nitro allowed in fuels is 16% by volume. This is to be measured using the NitroMax instrument in accordance with the NitroMax instructions.

**1.3.2** Fuel should only consist of a mixture of Nitro Methane, Methanol and Lubricating Oil, no other additives are allowed. Random samples of fuel will be taken during the meeting.

**1.3.3** The fuel system capacity including fuel pipe and filter (if fitted in line) from the tank to the carburettor shall not exceed 125cc, no loose inserts are allowed to reduce the fuel tank capacity. In the event of a fuel system measuring above 125cc, the fuel system shall be retested immediately. If upon retest the fuel system measures above 125cc, then the fuel system will be deemed to have failed. (The car must not be touched by anyone other than designated officials and remain in the scrutineering area)

## **Tyres and Wheels**

**1.4.1** Maximum width of REAR tyre 64 mm

**1.4.2** Tyres must be black in appearance with the exception of any sidewall detail and may only comprise of a maximum of four rings of rubber for the REAR tyres and three rings maximum for the FRONT

Axles, quick release mechanisms or any items shall not protrude beyond the wheel rim.

Where permitted by the tracks the surface will be treated with a suitable additive to improve grip levels.

## **Bumpers**

**1.5.1** Front bumpers must be fitted to the car to the same design and material as fitted to “standard” kit car.

If a commercially available rear bumper is fitted it must finish no more than 50.0 mm behind the rear axle centre line.

## **Bodies**

**1.6.1** Only body shells from the approved BRCA 8th Circuit list may be used. The body shell must have an EFRA number moulded into it.

**1.6.2** The front, side and rear windows if fitted to a car body must remain transparent.

**1.6.3** Side windows may be removed to assist cooling.

**1.6.4** All bodies must have the front and rear wheel arches cut out if the original car on which the body is modelled had them cut out.

**1.6.5** No portion of chassis, wheels, tyres or any other item may extend beyond the body.

*Note this does not apply to the vertical protrusions allowed for cylinder head, INS box fuel filler cap and aerial which are covered under rule 1.6.11*

**1.6.6** When initially entered in a meeting the body must be neatly finished and complete.

**1.6.7** The body and chassis must be securely joined at all times when the car is racing.

**1.6.8** Body shells may only be strengthened / supported with the addition of plastic lexan or carbon fibre.

**1.6.9** Wing or piano wire must not be used for body strengthening.

**1.6.10** Maximum width measured at the top of the rear wing and on top of the sides is 267mm. The lower sides of the body will not be taken into account during technical inspection (Scrutineering)

**1.6.11** A 10mm allowance is permissible around protrusions through the body shell (such as engine, roll over bar etc)

**1.6.12** If a closed cockpit bodyshell is used a suitable aperture is allowed in the windscreen for engine cooling purposes, with a maximum size of 6 sq cm.

**1.6.13** The maximum height of the rear of the body to be 170mm excluding the trim tab with a 20mm spacer under the chassis.

**1.6.14** No extra wings are allowed to be fitted, but an external trim tab can be fitted to the rear of the body which must not exceed a height of 180mm with a 20mm spacer under the chassis.

**1.6.15** All other rules and regulations covering tyres, body width, bumpers and apertures apply.

## **Operating**

**1.9.1** Lithium based traction batteries (such as Lipo and Life) must be charged in a suitable charging pouch using a suitable lithium battery charging systems only.

**1.9.2** The meeting will officially begin at the opening of the track for practise at 9am on Saturday and will officially end after the last final on Sunday. After this time all 8<sup>th</sup> Circuit construction rules apply and must be complied with at all times.

**1.9.3** The use of EU/UK approved DECT5 technology headsets operating in the OPCOM approved frequency range of 1880 to 1900 MHZ only are permitted for the purposes of communication between driver and mechanic. The use of mobile phones is not permitted.

**1.9.4** The pit lane must be kept clear at all times.

The pit lane must be kept clear at all times. Re-fuelling must take place clear of cars passing through the pit lane and fuelling device itself must remain behind the rear face of the pit wall at all times.

Mechanics must not let their cars go in front of cars coming down the pitlane at any time. They must also not step into the pitlane at any time during a race

Only one mechanic per driver to be allowed in the pit lane during qualifying and 2 mechanics per driver in finals.

Any infringements will be subject to a minimum of stop go penalty

**1.9.5** No car to be driven at any time against the normal flow of traffic on the race track or pitlane. No cars to enter pitlane from wrong direction except in cases of incident, failure or if otherwise directed by a race official. Penalty to be loss of FTD or in case of a final disqualification.

**1.9.6** At the end of a heat or final all cars that have taken part in that heat/final must be taken together with the fuel bottle to the scrutineering area. The fuel bottle must contain sufficient fuel for the nitromethane content and fuel tank capacity to be tested. In the event that the car is presented for scrutineering with insufficient fuel then the car will be deemed ineligible and penalty A will be applied.

**1.9.7** All competitors are to provide and use personal transponders. It is the driver's responsibility to ensure that the transponder RC4 compatible and has been logged on the section's database.

**1.9.8** Qualifying duration will be 4 minutes plus time to complete last lap.

*Note*

These construction rules are for the BRCA 1:8th Circuit Class and may differ in some slight respects from those in other countries. Please be aware that if you are racing in another country or at a GP your car may need to be altered to suit the rules used at these events.

The rules are written on the basis of "If it does not say you can you cannot" if you have any doubt about a rule please do not hesitate to ask one of the committee to clarify the situation before you do it

### Appendix 1 Penalties

<b>Penalty Type</b>	<b>Infringement during Qualifying</b>	<b>Infringement during Finals</b>
<b>A</b> <b>1.1.1, 1.1.2, 1.1.4</b> <b>and 1.1.5.1.3.1,</b> <b>1.3.3, 1.4.1, 1.5.1</b> <b>and 1.6.x</b>	Loss of qualifying time from the heat in which infringement was found.	Demotion to 10 <sup>th</sup> place in final, therefore moving drivers who finished behind up a place. In the event of more than one driver having infringements they are awarded equal 10 <sup>th</sup> place.
<b>C</b> <b>1.3.1</b>	10 Place qualifying penalty, dropping the driver 10 places once the complete qualifying has finished.	10 point deduction from the drivers overall championship score, penalty to be taken off the drivers end of season championship score.
<b>D</b> <b>1.1.6</b>	Disqualification from the entire meeting, not allowed to compete in any further qualifying or finals. Driver maybe asked to leave the circuit.	Disqualification from the entire meeting, no championship points awarded regardless of finishing position.

<p><b>E</b> <b>1.2.1, 1.3.2 and 1.4.2</b></p>	<p>12 month ban from all National meetings, ban starts from date of infringement, all championship points accumulated up to the that point will be cancelled. Points for other drivers will not be recalculated.</p> <p>Referred to BRCA Exec for the consideration of removal of competition licence.</p>	<p>12 month ban from all National meetings, ban starts from date of infringement, all championship points accumulated up to that point will be cancelled. Points for other drivers will not be recalculated.</p> <p>Referred to BRCA Exec for the consideration of removal of competition licence.</p>
---	--	--

### **BRCA 8<sup>th</sup> Circuit Race Meeting Rules and Procedures**

See BRCA website [www.brca.org](http://www.brca.org) for homologation lists, race procedures, calendar and the latest news.