



BRCA 8th Electric Circuit

Construction and Operating Rules 2020

1.1.1 Car must be an 8th scale electrically powered 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 On all cars braking must be a combination of electronic speed controller and motor (dynamic braking) only via the single speed fixed transmission to the rear wheels.

1.1.4 Minimum weight to be 2500g with exception for fixed chassis cars without any moving suspension components which will have minimum weight limit of 2200g

1.1.5 All cars must be fitted with a failsafe device, this can also be incorporated into the receiver or speed controller..

1.1.6 It is permitted allowed to use a second car for wet weather racing. The wet car may only be used when weather conditions deteriorate and the Electric Drivers Representative advises that use of the wet car is permitted. Any driver may swap back to their number one car at any time following this should they wish to do so. The driver must ensure that the personal transponder of both cars are registered or that both cars use the same transponder number

Batteries / Motors and Speed Controllers

1.2.1 Batteries to be any commercially available hard cased Lithium Polymer up to maximum of 4s. These may be installed in any configuration, 1x4s, 2x2s, 4x1s
The maximum permitted voltage of the cells when checked at anytime using the section multimeter must be as per Electric Board specifications.

1.2.2 The brushless motor and speed controller combination must be or have been previously commercially available and have a maximum UK recommended retail price (RRP) of £325 including all taxes. The motor must have a 5mm pinion shaft.

1.2.3 Speed controller reverse operation must be disabled.

Tyres and Wheels

1.4.1 Maximum width of REAR tyre 64 mm

1.4.7 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 suitable water/sugar based additive (Cola or similar) on Friday and or Saturday 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.

Bodyshells from the approved BRCA 8th circuit list may be used. The bodyshell should be commercially available and may have an EFRA number moulded into it.

Note. For bodyshells without an EFRA number to be included on the BRCA 8th Circuit Electric bodyshell list a sample of the specific bodyshell must have been submitted to the BRCA 8th Circuit Section for checking and BRCA 8th Circuit approval issued. Importers or distributors requiring 8th electric bodyshell approval must in the first instance send their request to 8thcsec@brca.org

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. Commercially available bodyshell vents are permitted.

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.

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 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.

Operation

- 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 8th 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.

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 to the scrutineering area.

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 will be 5 minutes plus time to complete last lap.

Note

These construction rules are for the BRCA 1:8th Electric 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 Maximum Penalties

Rules	Infringement during Qualifying	Infringement during Finals
1.1.1, 1.1.2, 1.1.4, 1.1.5, 1.2.3, 1.4.1 , 1.5.1, all 1.6.x	Loss of qualifying time from the heat in which infringement was found.	Demotion to 10 th 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 th place.
1.1.3	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.
1.1.6	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>1.2.1, 1.2.2, 1.4.7,</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 consideration of the removal of competition licence.</p>
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See BRCA website www.brca.org for homologation lists, race procedures, calendar and the latest news.