

# BRCA SPORTSCAR ENDURANCE CHAMPIONSHIP

## Regulations for the Stafford Outdoor 5Hr Endurance Race

### 11. GENERAL RULES

- It is each competitor's responsibility to ensure that their car meets all technical and eligibility requirements.
- 11.1 ~~The Championship Committee are empowered to legislate at any time against any new equipment that in the opinion of the committee detracts from the essential skill of the driver controlling the car during racing.~~
  - 11.2 No car shall be constructed or presented for racing so as to be dangerous to persons or cause damage to competitor's cars or the track surface.
  - 11.3 The body and chassis must be securely joined at all times when the car is on the track.
  - 11.4 All cars must have a minimum of one identifying number to the front of bodyshell.
  - 11.5 Only one drive motor is allowed per car at a time.
  - 11.6 Tyre treatments are not allowed, only CA (super) glue, glue activators and/or brake cleaner equivalents may be applied to the tyres.
  - 11.7 The use of tyre warmers is not allowed.
  - 11.8 The use of multiple-speed transmissions (gearboxes) is not allowed.
  - 11.9 Traction control is not allowed.
  - 11.10 Active suspension is not allowed.
  - 11.11 Gyroscopes are not allowed.
  - 11.12 Slipper clutches are not allowed.
  - 11.13 Suspension movement sensors are not allowed.
  - 11.14 Wheel speed sensors are not allowed.
  - 11.15 Tyre slip sensors are not allowed.
  - 11.16 2 ways radios are permitted using UK approved frequencies as long as they do not interfere with RC transmitters.

### 12. TECHNICAL RULES – 4WD LMH (Hypercar)

- 12.1 4WD Touring Car chassis only
- 12.2 The main chassis cannot be changed during a race. Repairs must be carried out in the 'Garage'.
- 12.3 Dimensions: Wheelbase: 250 to 270mm, Width (without body): 170 to 190mm
- 12.4 The minimum car weight, including personal transponders is 1350g.
- 12.5 ~~All wheels/tyres must be marked; the process will be advised at each meeting by the appropriate officials. Markings must be clearly visible.~~
- 12.6 Tyres – Slick and treaded are from a controlled list. Maximum 2 full sets of 'Dry' tyres per final plus 'Wets'
- 12.7 Cars must be fitted with an active voltage alarm set to 6.6v (or higher). A car is permitted to cross the timing line once with the alarm sounding before pitting for a battery change.

### 13. BODYSHELLS

- 13.1 LMH shells only from specified list that will be frozen at start of season.
- 13.2 Shells must be able to fit to chassis without modifying the shell and must be cut to cutlines.
- 13.3 Wing and foils included with the shell fitted as designed. No extra aero parts or different wings allowed. Wheel arch extension cover panels on Mon-Tech CV are encouraged but can be omitted.
- 13.4 No holes or slots are allowed on the body or wing, except for body post and 1 (max 5mm) aerial hole, and only if a protruding aerial is fitted.
- 13.5 Windows are to be clear or tinted and must be clearly defined as windows.
- 13.6 Under body/chassis aerodynamic aids of any nature are not allowed. Smooth Lexan under trays may be fitted to waterproof the cars. Items to aid strength (including repairs), sti2ness of the shell, or preventing the shell from becoming "tucked" are allowed.
- 13.7 Details of all front and rear lights plus the main front grill must be clearly contrasted from the surrounding paintwork.
- 13.8 All bodyshell features (front splitter / bumpers) from the original moulding must remain on the shell.
- 13.9 Damaged shells can be replaced during a final. Shell must be of the same type and similar colour scheme to the start shell.
- 13.10 LMH, Retro sportscar and Iconic liveries ONLY. 'RC Race-paint' designs, and single colour schemes will not be allowed (unless faithfully replicating a genuine livery). Teams should keep their colour scheme all season. Team registration at the start of the season will include nomination of colour scheme, which must be unique to the team. Liveries used in the previous season by another team cannot be selected. They must be unused for a whole season before they can be assigned to a new team.

### 14. MOTORS

- 14.1 At Sanctioned events, only motors that are currently homologated and listed by the BRCA Electric Board are allowed. This list will be frozen on 1st April, only motors listed at this point will be allowed for the duration of the season. Full technical data of homologated motors is available via the BRCA Electric Board Website.
- 14.2 21.5t Brushless Motors – only 21.5 turn (or greater) stock spec brushless motors approved by the Electric Board are allowed.
- 14.3 Any team found using an illegal motor will lose all lap scores up to that point. If found using an illegal motor for the second time the driver may be excluded from all sanctioned events for the rest of the season.

### 15. ELECTRONIC SPEED CONTROLLER

- 15.1 Any ESC from the Zero-Timing 'Blinky' ESC list approved by the BRCA Electric Board are allowed.
- 15.2 Blinky ESCs must not be fitted with any device (active or inactive) that allows settings to be changed without physical contact being made with the ESC.

## 16. BATTERIES

All cars will be powered by a single 2S Li-Po battery approved and homologated by the BRCA Electric Board. Full technical data of homologated batteries is available via the BRCA Electric Board Website.

- 16.1 All power packs shall be balance charged on a suitable charger and in a sealed LIPO safe/sack/bag specifically designed for this purpose.
- 16.2 Charge rates are recommended manufacturer's maximum limits which are listed on the Electric Board (EB) homologation list.
- 16.3 Failure to adhere to charging rules will result in the member being removed from the meeting and the circumstances of their non-compliance being sent to the BRCA executive committee for consideration of the member's BRCA license being revoked. The misuse or abuse of power packs has potentially dangerous consequences and will not be tolerated. 16.4 The maximum voltage for a 2S LiPo is to not exceed 8.40 volts at any time. 4.20v per cell
- 16.5 The minimum voltage for a 2S LiPo is to not fall below 6.40 volts at any time. 3.20v per cell, including when under load.
- 16.6 The heating of LiPo cells is not allowed.
- 16.7 All cars must have an active voltage cutout, to be checked before the start of the final.