





### 3 Definition of Brushless Motor

- 3.1 13.5 brushless - Any motor listed in any of the Electric Board Homologation List for Brushless Spec Motors (13.5) as updated from time to time.
- 3.2 17.5 brushless - Any motor listed in any of the Electric Board Homologation List for Brushless Spec Motors (17.5) as updated from time to time.

### 4 Definition of a Zero-timing Speed Controller

- 4.1 Speed controllers may not be equipped with any form of automatic or programmable timing advance. If this feature is available on the particular speed controller it must be disabled and placed in an approved mode - i.e. the "ROAR blinking LEDs mode." Only Speed controllers from the BRCA Approved Blinky ESC's list may be used.
- 4.2 Reverse function must not be used in GT12-class cars at Nationals.

### 5 Batteries Allowed

- 5.1 Any Batteries conforming to the current Electric Board 1S Stick and Saddle LiPo battery list as updated from time to time. All Batteries used in any competitions MUST be hard-cased. Soft cases or no cases are not allowed.
- 5.2 Cars with 13.5T or 17.5T Brushless Motors will be powered by cell/s with a maximum nominal voltage of 3.8V.

### 6 Chassis and Components

- 6.1 The chassis component will consist of one continuous sheet of material that extends from a minimum 10mm ahead of the front axle line and runs continuously along the car to end 25mm minimum behind the rear axle line. The chassis may not include any features designed to allow the front and rear axle to rotate along the central axis of the car relative to each other. (Intent – that the chassis supports all the suspension components and is sufficiently rigid not to be used as a working part of the suspension system/s).
  - 6.1.1 Chassis shape and hole pattern to be homologated, Manufacturers may submit a maximum of 3 designs per 12 month period. Legal chassis's listed in Appendix 2.
    - No modifications to chassis
    - Design may be offered in a "alloy" or "composite" version
    - Edges may be smoothed / sanded / sealed
    - Chassis must be commercially available
  - 6.1.2 Metals used in the production rolling chassis and any aftermarket parts may only be brass, steel or aluminium with the exception of the GT12 SuperCup class where, solely for the use as turnbuckles, titanium will be allowed. Brass, lead, and steel may be used as weights.
- 6.2 All suspension systems must operate independently of the chassis component.
  - 6.2.1 Separate dampers are only allowed on the rear suspension. Dampers requiring seals to prevent the egress of any type of damping medium are not allowed. (Intent – that dampers are non-sealed 'straw' or 'tube' style. Dampers with any type of damping medium contained in a sealed reservoir are not permitted).
- 6.3 Front suspension may be independent provided that the suspension design does not have any pivot, rod or other mechanism that alters the wheel camber in roll relative to the

chassis during its full travel. (Intent – that suspension systems from Touring Cars, GT10 cars, 12<sup>th</sup> cars and F1 cars featuring pivoting suspension arms are not used).

COMMITTEE IS CURRENTLY WORKING ON A RULE IMPROVEMENT WITH CURRENT MANUFACTURERS

- 6.4 The rear axle must not have any articulated element and may be fitted with a differential
- 6.5 Only a single fixed speed transmission is allowed.
- 6.6 Gears in the single fixed speed transmission must be 32DP or 48DP only.
- 6.7 Rolling element (ball) bearings are allowed on the front and rear axles.
- 6.8 Cars may only have two driven wheels with the drive to the rear axle.

**End of Construction rules**



## 1/12th Electric Circuit

The following Appendices form part of the Rules above

### Appendix 1 – Body Shells

Only GT body shells are allowed. At the time of submission for homologation, the full sized car upon which the body shell is based must be currently FIA homologated (for GT Competition) and have been raced within the previous 3 years. All shells must be a reasonable representation of the full sized car as judged by the GT Section Committee. The final decision on including bodies in the approved list rests with the GT Section Committee. Manufacturers are recommended to contact the 1/12 Section GT12 Representative to confirm if any specific car is permitted. (Intent – that LMP cars and those designed specifically for racing are not allowed). As part of the homologation process, the manufacturer's part number must be clearly marked in the lower corner of the windscreen area.

The following is the list of approved bodies for the GT12 class:

#### Kamtec

- Kamtec Lotus GT1 (Kamtec part no. GT01)
- Kamtec Ascari GT3 (Kamtec part no. GT02)
- Kamtec Aston Martin (Kamtec part no. GT03)
- Kamtec Type F (Kamtec part no. GT04)
- Kamtec Porsche GT3 (Kamtec part no. GT05)

#### Mardave

- Mardave Lotus GT1 (Mardave part no. V140)
- Mardave Ascari GT3 (Mardave part no. V151)
- Mardave Aston Martin (Mardave part no. V160)
- Mardave GT2 (Mardave part no. V131)
- Mardave Porsche (Mardave part no. V113)
- Mardave Ginetta (Mardave part no. V161)

#### Penguin Custom BodysHELLS

- Lambo GT12 (part number PEN01)

#### Protoform

- Protoform PF-M12 (Protoform part no. #1613-30)

#### Screwz4RC

- Audi R8 (part number G903)

#### Zen-Racing

- Zen-Racing GTM (part number PBGT02)
- Zen-Racing GTF (part number PBGT03)

#### Montech

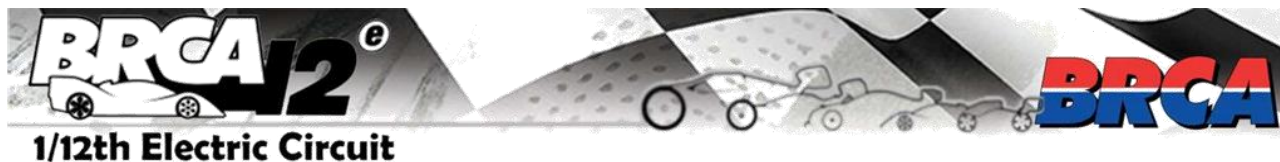
- Montech MLGT3 (part number MT018001)
- Montech LTS-GT (part number MT018012 & MT018012L)

#### Bitty Design

- Bitty Design LS3 (part number BDGT12-LS3)

The following link contains info on the current FIA GT homologated lists. Only cars listed in the GT3 class are eligible.

<https://www.fia.com/homologations> - Use "list of Homologated Vehicles classified by number".



## 1/12th Electric Circuit

### Appendix 2 – Chassis

The following is the list of approved Chassis's for the GT12 class.

Chassis shape and hole pattern to be homologated, Manufacturers may submit a maximum of 3 designs per 12 month period.

- No modifications to chassis
- Design may be offered in a "alloy" or "composite" version
- Edges may be smoothed / sanded / sealed
- Chassis must be commercially available

#### Schumacher

- U3981 SupaStox Chassis 6 Cell/2s Saddle
- U3957 SupaStox Chassis 4 Cell/1s/Shorty
- U4649 SS GT - S1 Chassis
- U4623 SS GT - C/F Chassis
- U4816 Atom - Alloy Chassis
- U7276 Atom CC - C/F Chassis

#### Zen-Racing

- ZENC101 RSGT12 Main Chassis
- ZENC106 RSGT12 Twill Carbon
- ZENA100 RXGT12 Aluminium Chassis
- ZENC150 RXGT12 Carbon Chassis

#### Mardave

- MARCE-01 Mardave CE
- MARCEC-01 Mardave CEC
- MARAC-12 Mardave AC12
- MARA-001 Assassin
- MARGT-001 Assassin GT
- MARVEN-001 Venom
- MARVGT-001 Venom GT - Carbon Chassis
- MARVCC-001 Venom CC - Alloy Chassis

#### ORE Racing

- R318 ORE TwelveGT Carbon
- R653 ORE B2B Carbon
- R722 ORE B2B-W17 Alloy

### End of Appendices

## Revision History

V1.0 JG - Amended form EGM 2014 (21 May 2014)  
V1.1 MS - Shell List Updated (21 May 2014)  
V1.2 MS - Incorrect Blinky Diagram Removed (22 May 2014)  
V1.3 JG - Audi Shell Added (01 June 2014)  
V1.4 PL - Lambo GT12 bodyshell added (23rd January 2015)  
V1.5 DG - Updates from 2015 EGM (1 Sept 2015)  
V1.6 DG - Changed Appendix 1 to state GT Section committee instead of 1/12th Section Committee (22 Sept 2015) V1.7 MS – Re-formatted as construction rules only (24 Sept 2015)  
V1.8 DG - Porsche GT3 Bodyshell added (23 Jan 2016)  
v2.0 DG - Changes made after 2016 EGM (24/05/2016)  
v2.1 DG - GTM Bodyshell added (19/01/2017)  
v3.0 DG - Changes made after 2017 EGM (1/11/2017)  
v3.1 NC - GTF Bodyshell added (19/02/2018)  
v3.2 NC - Changes made after 2018 EGM (27/08/18)  
v3.3 NC - MLGT3 bodyshell added (01/09/18)  
v3.4 LO - LS3 bodyshell added (16/10/18)  
v3.5 LO - LTS-GT bodyshell added (05/11/18)  
v3.6 MRC - Updated introduction (no rule changes)