

BRITISH RADIO CAR ASSOCIATION

1/10th Electric Circuit
Section Handbook 2016



www.brca.org

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Unit 1, European House, Hackhurst Lane, Hailsham, East Sussex, BN27 4BW

### How to use this section handbook

This booklet is aimed at competitors or officials for 1/10th electric powered Touring Cars and F1 cars, enabling them to have the information required for the class at all times. However it should prove useful to all club racers too as we hope it will give the reader more `information about our national series.

The information contained herein should be read in conjunction with the Association Handbook as the General Rules contained in the handbook apply to us all, at all events, and in any circumstances take precedent over sectional rules. It is every members responsibility to ensure they have read and understand – ask an executive official as appropriate for clarification if you don't.

### The application of the rules works thus:-

The Association General Rules apply at all events we go to, including most club racing as we are all members of the association at all times, Sectional Rules (as in this book) apply at Nationals and Clubman Nationals, as sanctioned by the section committee. Sectional rules do not apply at clubs, unless the clubs wish them too and it is entirely the clubs choice either way.

### **Changing a Rule**

Every rule in this booklet and the Association Handbook was proposed and voted in by one of your fellow racers – none of the committees can simply 'make up' a rule. If you don't like a rule you can easily try and have it changed (though the first thought should be to find out the rationale of why one of your fellow racers proposed it in the first place perhaps?) If you're happy a rule needs changing get somebody else to agree with you – a seconder – and then write/email to one of the following people:-Section Rule to be changed – Section Secretary – who will liaise with you to ensure it's then voted on at their section conference.

Association General Rule including the Constitution – Association Secretary - who will liaise with you to ensure it's voted upon at the Association annual general meeting.

You should endeavour to be at any meeting where a rule change, you have proposed, is taking place as it will be discussed, possibly amended, plus you'll almost certainly be asked to elaborate on it.

### Summary

'The Rules' should be the easy bit of our sport, but they're not as we're all passionate about our sport and should want to have an input into how it's run, make sure you have your say, the Association works because people get involved and make a difference.

If you don't like how something is being done, you should offer to do it yourself, every Association official is a volunteer and they are doing a role because it needs doing. However it as much your responsibility to do that task as it is theirs – just that they volunteered to do it before you had the opportunity to offer to do it better.

### Introduction

Hello and Welcome to electric Touring car and F1 racing.

1/10th scale, electric powered touring cars are 4 wheel drive machines, capable of speeds in excess of 70mph, making them the fastest electric power class. They are made from carbon fibre and feature advanced electronics, making them one of the most tunable classes. F1 is a new class within our section, but they share the same technology as the Touring Cars and are just as tunable.

The national events for our section is divided into 2 different series, the National series over 5 rounds, and the Clubman National over 7 rounds. You can find more information on these series further into this booklet. As mentioned above, the F1 class is a new one and for 2016 and will be run as part of the Clubman National.

Both the National and Clubman National series are run outdoors, with the season running from 1st April to 30th September. All of the venues we visit are purpose built, tarmac circuits. All classes run on a controlled tyre which ensures a level playing field and reduced cost in tyre selection. The tyre we use is voted on by our drivers before the season starts. We also vote on which tracks we visit through the year, so our drivers have a lot of say in the direction our series takes.

We are an innovate section. For the 2016 series we have made all junior entries into our events free, as we recognise that our young drivers need to be encouraged and nurtured into what we hope will be the world champions of the future. We have also reduced our National and Clubman national entry fees for 2016, as well as putting on a free to enter GP at the fantastic Stonehaven circuit.

Our national series has become world renown for its competitiveness and prestige. This has been thanks in no small part to the will and enthusiasm of club and BRCA officials and also of our competitors, who have countless years of experience and a vast knowledge base to share with newcomers. We like to think of ourselves as a friendly class of RC racing in which you can choose to compete at any level.

Our aim is to organise the biggest and best 1/10th scale Touring Car and F1 National Championships in the world, while giving good value for money. We hope that you will choose to become a part of what we do and come and race with us.

I wish you ever success with your racing this season and hope to see you trackside.

Mark Trinder Chairman, BRCA 1/10 Electric Circuit Section

### 2016 Committee

**Mark Trinder** Chairman and EFRA Rep



**Kris Kennedy** Treasurer





**Alister Hart National Scrutineer** 





**Adrian Jefferies** 

Secretary and

National PRO

**Chris Betts** 



Mike Haswell Clubman's Scrutineer Timekeeper



Peter Covell & Lisa Keen Clubman's PRO







**Elliott Harper** National Driver's Rep



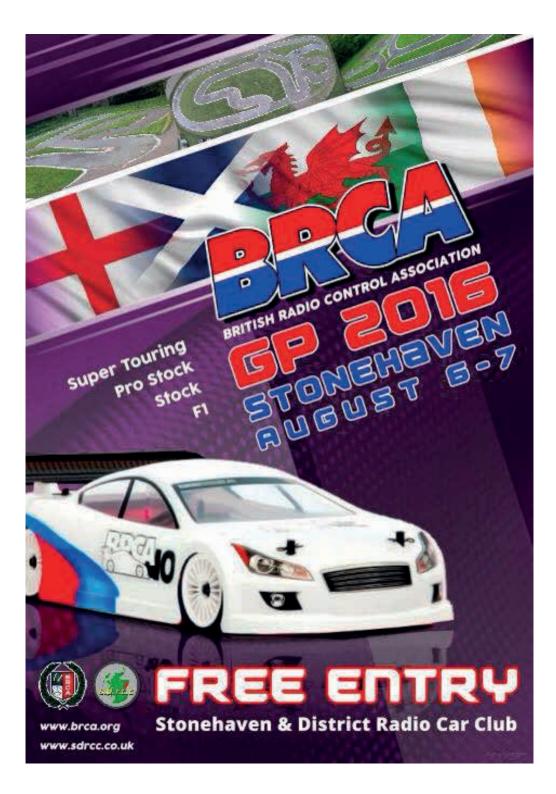
**Dom Shore** Clubman Driver's Rep

**Dale Burr** 

Competition

Secretary





### Electric Touring Car and F1 - A Beginners Guide

Taking up a brand new hobby is a somewhat daunting prospect for someone of any age or background. There's a lot to learn and take on board, often before you've really started out properly. RC car racing is no different, and in fact nearly always it will be of benefit to do some reading and find out the basics before committing to a purchase or making a decision.

This article assumes that you've already decided that RC racing is for you and that you're considering Electric Touring Cars or F1 as the class to start off with, or maybe you've previously raced another class such as nitro on road or electric buggies and are coming in to 1/10th Electric Circuit for the first time.

The short checklist below outlines the milestones that you'll need to reach in order to go from 'having an interest' to 'going racing' in either class;

- Become a BRCA Member
- Find your nearest club that supports the class
- Purchase the equipment you need
- · Build/prepare your car and go racing
- · Take your racing to the next level

### Become a BRCA Member

BRCA membership is important and should be the first thing to cross of your 'to do list'. For more information about what BRCA membership provides and why it is important, visit the BRCA website at www.brca.org. You can also use this link to join the BRCA online.

### Find Your Nearest Club

1/10th Electric Touring Cars and F1 cars are designed specifically for racing, which means they aren't suitable for driving up and down the street or in a local car park. Therefore it is strongly advisable to find out where your nearest club is that supports either or both classes of racing and pay them a visit.

Finding your nearest club will not only allow you to establish where you will be able to race your car, but also to start getting that thing which money can't buy; good advice! On your first visit to the club, ask the racers there about their cars and the racing. What equipment do they use? How much does it cost and where do they buy it from? Are there any rules specific to the club that you need to be aware of? Establishing these things will lay the foundations for what comes next, give you a much better understanding of what racing entails and hopefully enable you to make informed decisions on what to buy.

### Purchase the Equipment you Need

Touring Cars and F1 Cars come in kit form and typically include the main chassis and suspension components along with a detailed assembly manual. There are lots to choose from and most of the major manufacturers make a competitive car. By using quality parts and testing, along with each manufacturer having a team driver programme, pretty much all of the leading brand cars would be winners in the right hands. It usually comes down to how you build, setup and drive the car rather than one chassis having an advantage over another. Choose a car that seems to be popular and has good backup for spare parts and advice.

In addition to a chassis kit you'll need a full set of electrics including radio gear. It is typically a good idea to choose a radio system which has adjustable features such as steering end points and throttle & brake



# Shop & Race Track



# Find us at

Oulton Hall Grounds Rothwell Lane Leeds LS26 8HN

0113 2603330

www.rccarshop.co.uk

curve. Whilst a little more pricey these tend to be of better quality, have a faster response and will help you get the most out of your car.

Electric Touring Car and F1 Cars use 2S Lithium Polymer (or LiPo) batteries. These have a nominal voltage of 7.4V and range in capacity from around 4000mAh to 8000mAh. There is a list of homologated packs that are legal for use at BRCA national events on the BRCA website.

There are 3 classes of Touring Car raced in our national series. All 3 classes run brushless motors and compatible electronic speed controllers or speedo's as they are known. Super Touring is the fastest and our 'blue ribbon' class. In Super Touring motor and speedo settings are open, meaning you can run whatever you like provided it is on the homologation lists. The Pro Stock class runs 13.5 turn motors with open speedo settings, whilst stock runs 17.5 turn motors with fixed or 'blinky' speedo settings. 'Open' and 'blinky' relates to dynamic timing that the speed controller is able to use to increase the performance of the motor. Blinky has no dynamic timing and a flashing LED on the speedo indicates this setting is being used, hence the name 'blinky'. Remember; the lower the number of turns the more powerful the motor. As with batteries, homologation lists of approved equipment can be found on the BRCA website.

What good is a car if it's got no wheels? Both the Touring Cars and F1 Cars use rubber tyres and a control tyre is selected at the start of the season which is then used at all of our events. This means there is no confusion about which tyre to use and gives everyone a level playing field.

There are a range of body shells available for both the Touring Cars and F1 Cars all of which come clear and unpainted, meaning you get to choose your colour scheme and design. As per the Motor and battery list, there is also a homologation list for body shells on the BRCA website. Each model gives differing handling characteristics so it is best to ask around and see what works best at your local track.

Finally, you'll need equipment to charge your batteries and a set of tools to use when working on your car. As with the other items above, seek advice online or at your local shop or club regarding what to buy.

### **Build Your Car and Go Racing**

The most important thing here is to TAKE YOUR TIME. All cars are very sensitive so try to be thorough when you build and prepare the car. Time spent in properly preparing your car will pay dividends in the long term and you'll be able to get the most out of your chassis. There's a wealth of information available online and the drivers at your local club will be happy to help too; just ask them for advice on what they do. You will find setup sheets online to assist in setting up your car.

By this time you should already have found your nearest club and have a good idea of how they operate. Take things slow and steady to begin with; concentrate on driving smoothly and consistently and the speed will build as you get more comfortable.

### Take Your Racing to the Next Level

Once you've been racing at club level for a while you may find that you want to go and experience different tracks and meet new people. This is one of the great things about RC Car Racing is there's a vast network of people, clubs and events to engage with, whatever your level of ability and experience.

It may seem daunting, but actually one of the best ways to learn about Touring Car or F1 racing is to enter a national championship event. These events are open to anyone and there is sure to be someone else competing at your level. What's more, you'll have direct access to help and advice from the country's fastest and most experienced drivers. It is probable that you'll learn more in a single national weekend than during several months of club racing as in many cases you'll be able to pick up and understand the do's and don'ts from other people instead of having to figure them out for yourself. For more information about national and regional competitions, visit the BRCA website.

Each year clubs from all over the country are invited to submit applications to host a round of our national championship. From there the drivers who competed in the series the previous year, get to vote on which tracks host the National and Clubmans National rounds. The competition Secretary then liaises with the host tracks and formulates a calendar for both series

Each round of the national series is an individual standalone event meaning you can enter as little as a single days racing if you've never tried one of our competitions before.

All entry is done via the BRCA website.

- Go to http://www.britishradiocarassociation.co.uk/10thEC-events
- As you scroll down you will see a list of the available events.
- Simply click on the Enter button next to the event you wish to enter to add this to your cart.
- You can then either click checkout to go on and complete you entry or add more events to add more entries to your cart.
- You will either be required to login to the website or if you've never previously registered then
  complete required the registration details.
- You will then be redirected to a paypal payment page to complete your entry.

Over the next series of pages you will find details of the events for the current season.





For Racers By Racers







# Capricorn RC





### All you would need for Electric and Nirto racing!

Unit 25 Heaver Trading Estate Ash Road Sevenoaks, Kent

**TN15 7HJ** 

Phone: 07432 701 712 Web: www.cpdracing.co.uk

Shop: shop.cpdracing.co.uk Email: sales@cpdracing.co.uk

### 2016 Calendar

### National

Round 1 - 30th April / 1st May - Cotswolds

Round 2 - 4th / 5th June - Adur

Round 3 - 9th / 10th July - Halifax

Round 4 - 13th / 14th August - Mendip

Round 5 - 10th / 11th September - West London

### **Clubman National**

Round 1 - 3rd April - Eastbourne

Round 2 - 24th April - Stafford

Round 3 - 22nd May - West London

Round 4 - 19th June - Bedworth

Round 5 - 17th July - Adur

Round 6 - 28th August - Cotswolds

Round 7 - 25th September - Halifax

### **BRCA GP - FREE entry**

BRCA GP - 6th/7th August - Stonehaven

### **2016 National Championship Summary**

A competitive series of two-day events, racing at outdoor tarmac tracks across the UK. While this is the top level of Touring Car racing in the UK, the Nationals are open to everyone. Drivers vary from world champions to club racers, from hotshot juniors to seasoned seniors!

#### Classes

### Touring Car 13.5 Open

13.5t motors.

'Open' ESCs (boost and turbo are allowed).

### **Touring Car Modified**

Any BRCA approved motor.

'Open' ESCs (boost and turbo are allowed).

### **General Rules**

Sorex 32RY pre-glued slick tyres. Max 3 sets per meeting.

Shimizu XG-RAIN pre-glued wet tyres. Max 2 sets per meeting.

Maximum lipo voltage of 8.40v. Lipos must be charged in closed lipo sacks.

Motors, lipos, and bodyshells must be on the relevant BRCA approved lists.

### **Meeting Format**

Timed practice in heats.

5 rounds of Round-By-Round qualifying. Your best 3 round positions are added together to give your qualifying position.

3 rounds of finals. Your best 2 final positions are added together to give the overall results, with trophies for the winners.

### Saturday

3 practice rounds.

3 qualifying rounds.

### Sunday

1 practice round.

2 qualifying rounds.

3 final rounds.

### Calendar

Round 1 - 30th April / 1st May - Cotswolds

Round 2 - 4th / 5th June - Adur

Round 3 - 9th / 10th July - Halifax

Round 4 - 13th / 14th August - Mendip

Round 5 - 10th / 11th September - West London

### **Entry Details**

£22.50 entry fee.

Free entry for all juniors! (16 or under on 1st October 2016)

Enter online at http://www.brca.org/10th/10ec/

### More Information

Go to the 1/10 Electric Circuit Section on the BRCA website: http://www.brca.org/10th/10ec/ Or search Facebook for 'BRCA Touring Cars'.

Please note; these are just a summary of the rules.

Please see the appropriate sections in the BRCA handbook for full technical and sporting rules.

### 2016 Clubman Championship Summary

A relaxed series of one-day events, racing at outdoor tarmac tracks across the UK.

If you enjoy racing at your local on-road club and fancy trying some other tracks, the Clubman series is for you!

#### Classes

#### Formula One

Maximum width 190mm.

21.5t motors.

'Blinky' ESCs (no boost or turbo).

Ride XR pre-glued rubber tyres. Max 1 set per meeting.

### **Touring Car 17.5 Blinky**

17.5t motors.

'Blinky' ESCs (no boost or turbo).

Sorex 32RY slick tyres. Shimizu XG-RAIN wet tyres. Max 2 sets of each per meeting.

### Touring Car 13.5 Open

13.5t motors.

'Open' ESCs (boost and turbo are allowed).

Sorex 32RY slick tyres. Shimizu XG-RAIN wet tyres. Max 2 sets of each per meeting.

#### **General Rules**

Maximum lipo voltage of 8.40v. Lipos must be charged in closed lipo sacks.

Motors, lipos, 'blinky' ESCs and touring car bodies must all be on the relevant BRCA approved lists.

### **Meeting Format**

Optional practice on Saturday.

Free practice Sunday morning (one session per class).

3 rounds (4 if time allows) of Round-By-Round qualifying (your best 2 round positions are added together).

2 rounds of finals, with trophies for the winners.

### Calendar

Round 1 - 3rd April - Eastbourne

Round 2 - 24th April - Stafford

Round 3 - 22nd May - West London

Round 4 - 19th June - Bedworth

Round 5 - 17th July - Adur

Round 6 - 28th August - Cotswolds

Round 7 - 25th September - Halifax

### **Entry Details**

£13 entry fee. Clubs may charge an additional £5 for Saturday practice.

Free entry for all juniors! (16 or under on 1<sup>st</sup> October 2016)

Enter online at http://www.brca.org/10th/10ec/

### **More Information**

Go to the 1/10 Electric Circuit Section on the BRCA website: http://www.brca.org/10th/10ec/ Or search Facebook for 'BRCA Touring Cars'.

Please note; these are just a summary of the rules.

Please see the appropriate sections in the BRCA handbook for full technical and sporting rules.

### National Round 1 - Cotswolds

# Address Cotswold MCC Kemble Airfield Cirencester

GL7 6BA

### Opening times

Saturday:- Gate opens at 07:30.

Sunday:- Gate opens at 07:30

Track records
Super Touring

20/314.80 13.5 Boosted

18/306.83

### **Facilities**

Grassed pitting area with a large area for camping and additional pitting. Compressor for car cleaning. Limited amount of covered pitting with mains power.

### Camping

Camping available Fri & Sat night £5 tent, £10 caravan. Electric hook-up available.

### **Toilet facilities**

Toilet block with separate gents & ladies toilets, sinks, showers & hot water

### Catering

A burger van will be present on both days. Hot and cold food and drink served at the onsite AV8 restaurant.

### Club contacts

Club secretary Minny Dyson minny.dyson@googlemail.com

www.cotswoldmcc.co.uk

### Shops

CPD Racing and Big G Racing will be on site all weekend





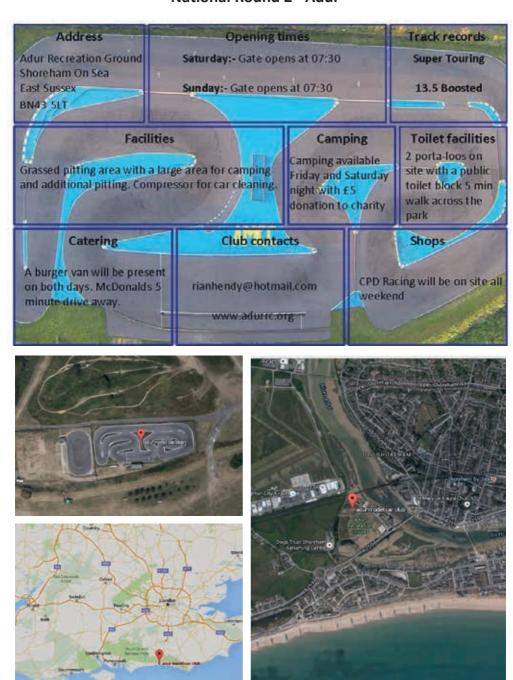




# CAR

Location	Shocks		Motor
Venue	Front	Rear	Brand
Date	Shock Type		Turns
Surface type	Springs		Advance
Surface left=smooth □□□□□	Oil		ESC
Grip Level left=low	Rebound		Brand
Drive Train Front Rear	Piston		Blinky
Solid Axle	Shock position	on (111111)	Drag Break
Solid one way axle	Front Suspension	n Rear	Min Break
One way Diff	Droop		Max Break
Ball Diff	Ride Height		Boost Timing
Gear Diff Oil	Camber		Boost Ramp
Cars Internal Ratio	Caster		Turbo Timing
Pinion Gear	Toe		Turbo Ramp
Spur Gear	Roll Centre		Radio
Drive Ratio	Roll Bars		Exp Throttle
	A 1 111		Exp Steering
Bodyshell	Additive		Dual Rate
Wing	Batteries		Steering Lock
Notes			

### National Round 2 - Adur



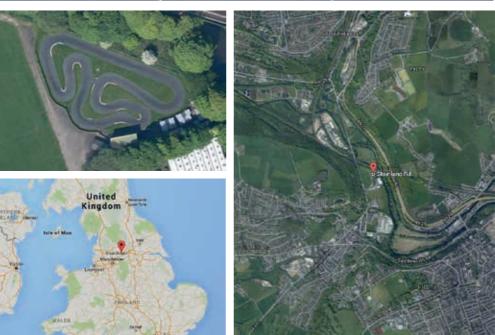


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Location	Sho

Location	Shocks		Motor
Venue	Front	Rear	Brand
Date	Shock Type		Turns
Surface type	Springs		Advance
Surface left=smooth □□□□□	Oil		ESC
Grip Level left=low	Rebound		Brand
Drive Train Front Rear	Piston		Blinky
Solid Axle	Shock position	on 🗆 🗆 📗	Drag Break
Solid one way axle	Front Suspensio	n Rear	Min Break
One way Diff	Droop		Max Break
Ball Diff	Ride Heigh	t $\overline{}$	Boost Timing
Gear Diff Oil	Camber		Boost Ramp
Cars Internal Ratio	Caster		Turbo Timing
Pinion Gear	Toe		Turbo Ramp
Spur Gear	Roll Centre		Radio
Drive Ratio	Roll Bars		Exp Throttle
			Exp Steering
Bodyshell	Additive (		Dual Rate
Wing	Batteries		Steering Lock
Notes			

### National Round 3 - Halifax





Bodyshell

Wing



Dual Rate

Steering Lock

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Location	Shocks			Motor
Venue	Front		Rear	Brand
Date		Shock Type		Turns
Surface type		Springs		Advance
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Grip Level left=low		Rebound		Brand
Drive Train Front Rear		Piston		Blinky
Solid Axle		Shock position		Drag Break
Solid one way axle	Front	Suspension	Rear	Min Break
One way Diff		Droop		Max Break
Ball Diff		Ride Height		Boost Timing
Gear Diff Oil		Camber		Boost Ramp
Cars Internal Ratio		Caster		Turbo Timing
Pinion Gear		Toe		Turbo Ramp
Spur Gear		Roll Centre		Radio
Drive Ratio		Roll Bars		Exp Throttle
			$\equiv$	Exp Steering

Notes

Additive

Batteries

### **National Round 4 - Mendip**

### Address

Accommodation Road Bleadon Weston-super-Mare, North Somerset BS24 OAP

### **Opening times**

Saturday :- Site open from 07:30

Sunday :- Site open from 07:30

### Track records

Super Touring Not available 13.5 Boosted Not available

### Facilities

Covered pitting area for approx 70 drivers.

Covered brick built rostrum. Compressor for car cleaning. Large car-park and camping area

### Camping

Available Fri & Sat. Tents £5 caravans £7 per night

### **Toilet facilities**

Separate ladies and gents

### Catering

Café open both days serving hot and cold food and drink

### Club contacts

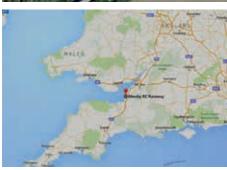
Andy Nancollis 07790 013319

Paul Morrissey 07712 079981

### Shops

To be confirmed









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Location	Shocks			Motor	
Venue	Front		Rear	Brand	
Date		Shock Type		Turns	
Surface type		Springs		Advance	
Surface left=smooth □□□□□		Oil		ESC	
Grip Level left=low		Rebound		Brand	
Drive Train Front Rear		Piston		Blinky	
Solid Axle		Shock position		Drag Break	
Solid one way axle	Front	Suspension	Rear	Min Break	
One way Diff		Droop		Max Break	
Ball Diff		Ride Height		Boost Timing (	
Gear Diff Oil		Camber		Boost Ramp	
Cars Internal Ratio		Caster		Turbo Timing (	
Pinion Gear		Toe		Turbo Ramp	
Spur Gear		Roll Centre		Radio	
Drive Ratio		Roll Bars		Exp Throttle	
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Bodyshell	Addi			Dual Rate	
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### National Round 5 - West London

# Address Sutton Court Road Hillingdon Middlesex UB10 9HI

### Opening times

Saturday:- Gate opens at 07:30

Sunday:- Gate opens at 07:30

### Track records

Not available

# The Track is area is surrounded by hard standing and grass area beyond that. The rostrum allows around 15 drivers to practice at a time. Timing is run using RC Timing and My Laps decoder. There is a compressor available for cleaning of Cars.

### Camping

Friday and Saturday, weather dependant. Free of charge

# Toilet facilities

Separate men's and ladies flushing toilet

### Catering

Burger van for both days

### Club contacts

### Email ask@wirc.co.uk Facebook

https://www.facebook.com/gr oups/39138999577/ Web site www.wlrc.co.uk

### Shops

To be confirmed. Tyres will be available all weekend









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CAR		

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Location	Shocks			Motor	
Venue	Front		Rear	Brand	
Date		Shock Type		Turns	
Surface type		Springs		Advance	
Surface left=smooth □□□□□		Oil		ESC	
Grip Level left=low		Rebound		Brand	
Drive Train Front Rear		Piston		Blinky	
Solid Axle		Shock position		Drag Break	
Solid one way axle	Front	Suspension	Rear	Min Break	
One way Diff		Droop		Max Break	
Ball Diff		Ride Height		Boost Timing (	
Gear Diff Oil		Camber		Boost Ramp	
Cars Internal Ratio		Caster		Turbo Timing (	
Pinion Gear		Toe		Turbo Ramp	
Spur Gear		Roll Centre		Radio	
Drive Ratio		Roll Bars		Exp Throttle	
				Exp Steering (	
Bodyshell	Addi			Dual Rate	
Wing	Batte	eries	<u> </u>	Steering Lock (	
Notes					

### Clubmans Round 1 - Eastbourne

### Address

500 Yards NORTH OF Knockhatch Adventure Park Hailsham Bypass (A22) Hailsham East Sussex BN27 3GD

### Opening times

Saturday:- Access to the track will be available from 9am, with practice from 9am to 6pm when the timing will be turned off but the track will remain open.

Sunday:- Gate opens at 7am, although if there are campers Saturday night, it will already be open.

### Track Records

17.5 Blinky 23 / 303.58, best 12.85

13.5 Boosted

24/301.30, best 12.33

### **Facilities**

The track is 3m wide around the full length of the track, which is around 150m. There is a compressor available for car cleaning. There is fully fitted race control using My Laps RC2 decoder and RC Timing software. There is a club gazebo that can fit approx 30 drivers and some limited undercover pitting for approx 15 drivers.

### Camping

Camping available Friday nights (by appointment), and Saturdays free of charge for 2016.

### Tollet facilities

Dedicated toilet block with ladies and gents flushing toilets, with running water

### Catering

Tuck shop serving hot and cold drinks, chocolates and sweets etc. Fully revamped on site burger chalet with extensive and competitively priced menu run by the club for the benefit of the club.

### Club contacts

Race Director and first contact, Darren Simpson 07980 750578, darren@diswebsolutions.com

Chairman, Stuart Colby 07824 514451, stu.colby@googlemail.com

www.eecc.co.uk

### **Practice fees**

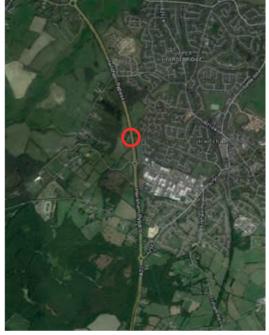
For 2016 we have elected not to charge any practice fees

### Shops

PitBitz and Zen racing will be on site all weekend









# CAR (

Location	Shocks	Motor
Venue	Front	Rear Brand
Date	Shock Type	Turns
Surface type	Springs	Advance Advance
Surface left=smooth □□□□□	Oil	ESC
Grip Level left=low	Rebound	Brand
Drive Train Front Rear	Piston	Blinky
Solid Axle	Shock position	Drag Break
Solid one way axle	Front Suspension	Rear Min Break
One way Diff	Droop	Max Break
Ball Diff	Ride Height	Boost Timing
Gear Diff Oil	Camber	Boost Ramp
Cars Internal Ratio	Caster	Turbo Timing
Pinion Gear	Toe	Turbo Ramp
Spur Gear	Roll Centre	Radio
Drive Ratio	Roll Bars	Exp Throttle
		Exp Steering
Bodyshell	Additive (	Dual Rate
Wing	Batteries	Steering Lock
Notes		

### Clubmans Round 2 - Stafford

### Address

Stafford RCMCC Fairway Stafford ST17 4LX.

### **Opening times**

Saturday:- The gate will open at 8am and the track will be open from 11am until 6pm

Sunday: gate will open at 7am.

### **Track Records**

17.5 Blinky 19/311.22

13.5 Boosted 20/305.80

### **Facilities**

Track is approx 3.5 · 4 meters wide and is approx 550 meters in total circuit length. The club has a compressor for use but please use safety glasses. Covered rostrum with capacity for 10 drivers. Full PA System around the Car Park. RCTiming Software. Hard standing pit area so no soggy feet.

### Camping

Free camping available Saturday night only. Hard standing only so 3" screws needing to anchor into tarmac. No water on site

### **Tollet facilities**

1 Ladies and 2 Gents Porta Loos which are clean at the start of each event

### Catering

Hot and cold food / drink will be available on Sunday courtesy of our regular burger van

### Club contacts

John Robson 07860899405, johnrobson rc@gmail.com

john@staffordrcmcc.co.uk

www.staffordrcmcc.co.uk

### Practice fees

Saturday practice will cost £5 per driver, per class

### Shops

MB Models & FTD Models









## CAR

Location	Shocks			Motor
Venue	Front		Rear	Brand
Date		Shock Type		Turns
Surface type		Springs		Advance
Surface left=smooth		Oil		
				ESC
Grip Level left=low		Rebound	$\subseteq$	Brand
Drive Train Front Rear		Piston		Blinky
Solid Axle		Shock position		Drag Break
Solid one way axle	Front	Suspension	Rear	Min Break
One way Diff		Droop		Max Break
Ball Diff		Ride Height		Boost Timing
Gear Diff Oil		Camber		Boost Ramp
Cars Internal Ratio		Caster		Turbo Timing
Pinion Gear		Toe		Turbo Ramp
Spur Gear		Roll Centre		Radio
Drive Ratio		Roll Bars		Exp Throttle
			=	Exp Steering
Bodyshell	Addi	tive		Dual Rate
Wing	Batte	eries	— J	Steering Lock
Notes				

### Clubmans Round 3 - West London

### Address

Sutton Court Road Hillingdon Middlesex UB10 9HT

### Opening times

Saturday:- 11am until 6pm Sunday:- Gate opens at 07:30

### Track records

Not available

### Facilities

The Track is area is surrounded by hard standing and grass area beyond that. The rostrum allows around 15 drivers to practice at a time. Timing is run using RC Timing and My Laps decoder. There is a compressor available for cleaning of cars.

### Camping

Saturday only and weather dependant. Free of charge

### **Toilet facilities**

Separate men's and ladies flushing toilet

### Catering

Sunday for the clubmans. Possibly Saturday as well depending on numbers

### Club contacts

Email ask@wirc.co.uk
Facebook
https://www.facebook.com/gr
oups/39138999577/
Web site www.wirc.co.uk

### Practice fees

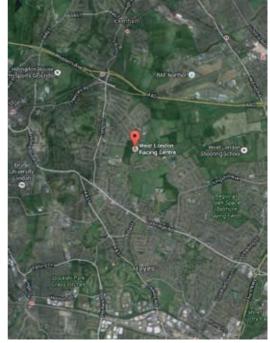
£5 for non club member

### Shops

To be confirmed. Tyres will be available all weekend









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CAR			
Location	1		Shoo
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Location	Shocks	Motor
Venue	Front Rear	Brand
Date	Shock Type	Turns
Surface type	Springs Springs	Advance
Surface left=smooth □□□□□	Oil	ESC
Grip Level left=low	Rebound	Brand
<b>Drive Train</b> Front Rear	Piston	Blinky
Solid Axle	Shock position	Drag Break
Solid one way axle	Front <b>Suspension</b> Rear	Min Break
One way Diff	Droop	Max Break
Ball Diff	Ride Height	Boost Timing
Gear Diff Oil	Camber C	Boost Ramp
Cars Internal Ratio	Caster C	Turbo Timing
Pinion Gear	Toe	Turbo Ramp
Spur Gear	Roll Centre	Radio
Drive Ratio	Roll Bars	Exp Throttle
		Exp Steering
Bodyshell	Additive	Dual Rate
Wing	Batteries	Steering Lock
Notes		

### Clubmans Round 4 - Bedworth

# Address Bedworth Rugby Club Smarts Road Bedworth CV12 0BP

# Opening times

Saturday:- Gates open 10am Track open 11am to 6pm

Sunday:- Gate opens at 07:30

### 17.5 Blinky 19 / 302.17 13.5 Boosted 20 / 300.17

### **Facilities**

Hard standing and grass pitting areas. A covered rostrum keeps the sun off you. Compressor available for car cleaning.

### Camping

Camping available Saturday night free of charge. No overnight toilet.

### **Toilet facilities**

Flushing toilet inside clubhouse. Shuts after Sat practice, reopens Sunday morning

### Catering

A burger van will be present on Sunday. Tea, coffee and cold drinks are available both days

### Club contacts

bedworth@rc-timing.com

### Practice fees

£5 per driver (i.e. no extra charge for two classes).

### Shops

FTD Models on Sunday Tyres available both days





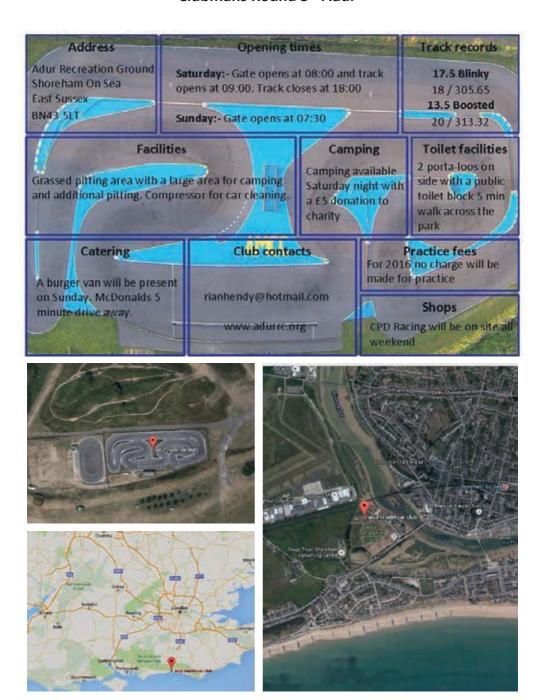




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Location	Shocks			Motor
Venue	Front		Rear	Brand
Date		Shock Type		Turns
Surface type		Springs		Advance
Surface left=smooth		Oil		
				ESC
Grip Level left=low		Rebound	$\subseteq$	Brand
Drive Train Front Rear		Piston		Blinky
Solid Axle		Shock position		Drag Break
Solid one way axle	Front	Suspension	Rear	Min Break
One way Diff		Droop		Max Break
Ball Diff		Ride Height		Boost Timing
Gear Diff Oil		Camber		Boost Ramp
Cars Internal Ratio		Caster		Turbo Timing
Pinion Gear		Toe		Turbo Ramp
Spur Gear		Roll Centre		Radio
Drive Ratio		Roll Bars		Exp Throttle
			=	Exp Steering
Bodyshell	Addit	tive		Dual Rate
Wing	Batte	eries	— J	Steering Lock
Notes				

### Clubmans Round 5 - Adur

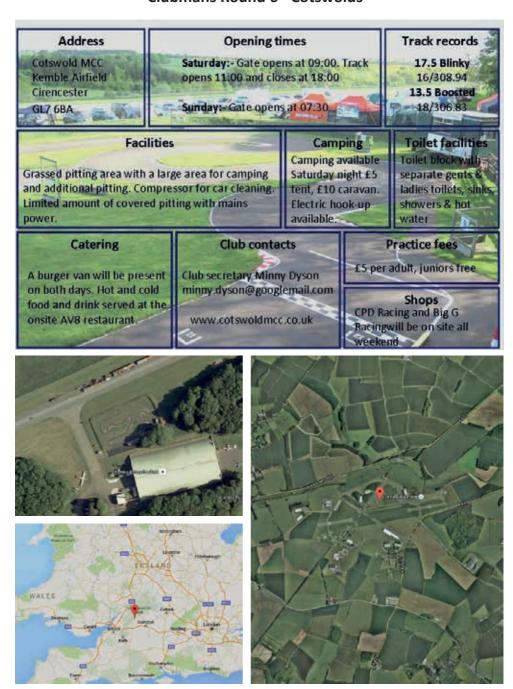




	0 00	CARS
CAR	500	
Location	Shocks	Motor
Venue	Front Rear	Brand
Date	Shock Type	Turns
Surface type	Springs	Advance Advance
Surface left=smooth □□□□□	Oil	ESC
Grip Level left=low	Rebound	Brand
Drive Train Front Rear	Piston	Blinky
Solid Axle	Shock position	Drag Break
Solid one way axle	Front <b>Suspension</b> Rea	min Break
One way Diff	Droop	Max Break
Ball Diff	Ride Height	Boost Timing
Gear Diff Oil	Camber C	Boost Ramp
Cars Internal Ratio	Caster C	Turbo Timing
Pinion Gear	Toe	Turbo Ramp
Spur Gear	Roll Centre	Radio
Drive Ratio	Roll Bars	Exp Throttle
	ALEC	Exp Steering
Bodyshell	Additive (	Dual Rate
Wing	Batteries	Steering Lock
Notes		

Notes

### Clubmans Round 6 - Cotswolds



# Touring car setup sheet

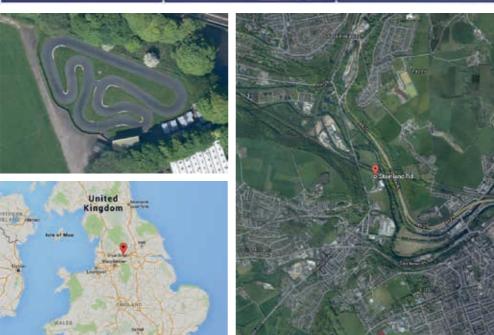


# CAR

		L			
Location	Shocks			Motor	,
Venue	Front		Rear	Brand	
Date		Shock Type		Turns	
Surface type		Springs		Advance	
Surface left=smooth □□□□□		Oil		ESC	
Grip Level left=low		Rebound		Brand	
Drive Train Front Rear		Piston		Blinky	
Solid Axle		Shock position		Drag Break	
Solid one way axle	Front	Suspension	Rear	Min Break	
One way Diff		Droop		Max Break	
Ball Diff		Ride Height		Boost Timing	
Gear Diff Oil		Camber		Boost Ramp	
Cars Internal Ratio		Caster		Turbo Timing	
Pinion Gear		Toe		Turbo Ramp	
Spur Gear		Roll Centre		Radio	
Drive Ratio		Roll Bars		Exp Throttle	
				Exp Steering	
Bodyshell	Addi			Dual Rate	
Wing	Batte	eries		Steering Lock	
Notes					

# Clubmans Round 7 - Halifax





# Touring car setup sheet



CAR								
Location	Shocks		Motor					
Venue	Front	Rear	Brand					
Date	Shock Type		Turns					
Surface type	Springs		Advance					
Surface left=smooth □□□□□	Oil		ESC					
Grip Level left=low	Rebound		Brand					
<b>Drive Train</b> Front Rear	Piston		Blinky					
Solid Axle	Shock position		Drag Break					
Solid one way axle	Front Suspension	Rear	Min Break					
One way Diff	Droop		Max Break					
Ball Diff	Ride Height		Boost Timing					
Gear Diff Oil	Camber		Boost Ramp					
Cars Internal Ratio	Caster		Turbo Timing					
Pinion Gear	Toe		Turbo Ramp					

Spur Gear	Roll Centre	Radio
Orive Ratio	Roll Bars	Exp Throttle
		Exp Steering
Bodyshell	Additive (	Dual Rate
Wing	Batteries	Steering Lock
Notes		

# 1/10th ELECTRIC CIRCUIT SECTION RULES 2016

# Version 1- 18th November 2015

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# APPENDIX:

Appendix 1 - Global Body Specifications

### 1. SECTION CONSTITUTION

- **1.1** The Committee has the authority to provide clarification and interpretation of the section rules.
- **1.2** At the discretion of the committee any driver, representative, mechanic or friend of a driver found to be under the influence of drink or drugs, or using abusive language or behaving abusively will be expelled from the meeting and may be subject to further restrictions on admittance to sanctioned meetings by the committee.
- **1.3** Rule proposals for the Section AGM will be published on the official BRCA website. These proposals must be received by the Section Secretary on or before the 1st Friday in September using the standard template provided on the BRCA section website.

#### 2. DEFINITION OF TERMS USED.

- **2.1** 'Committee' This is the BRCA 1/10th Electric Circuit Section Committee as established by the BRCA Constitution. Committee decisions require a quorum consisting of at least 40% of the total committee membership.
- **2.2** 'Sanctioned Event' This is any race event for which the Committee has approved the date, venue and organiser. Sanctioned Events will abide by 1/10th Electric Circuit Section Rules at all times. Only Sanctioned events may use the letters BRCA in their title.
- 2.3 'Organiser' This is the club or organization that hosts a Sanctioned Event.
- **2.4** 'National' This is a Sanctioned Event, the results of which count towards the BRCA  $1/10^{th}$  Electric Circuit National Championships.
- 2.5 'Race' This can be any Practice Heat, Qualifying Heat or Final.
- **2.6** 'Commercially Available' Any item being accessible for purchase by anyone and therefore must be or have been available in UK retail outlets in reasonable volume at any one time.
- **2.7** 'Track area' This is the only area in which cars may be raced. It will be defined by barriers designed to contain cars in the event of an accident. Only Competitors, their mechanics and Officials will be allowed to enter this area.
- **2.8** 'Blinky Mode' This is any speed controller approved by the BRCA Electric Board that satisfies the Zero Boost specification.

### 3. SANCTIONED EVENTS

#### 3.1 NATIONAL CHAMPIONSHIP SERIES - OUTDOOR

- **3.1.1** Venues to be chosen by an online vote of drivers who participated in at least the minimum number of counting rounds in the previous season.
- **3.1.2** Event Entry: Each meeting will have a maximum of 13 heats. Entry fee £22.50 per meeting. (£16 going to the host club. Any remainder, after booking fees, will go to the section

#### **3.1.3** Classes

- 'Super Touring' for Open Modified Brushless motors, (open choice from any Electric Board approved Brushless Motor list), with maximum of 7.4V nominal voltage LiPo battery.
- 'Pro Stock Touring' for 13.5t brushless motors with maximum of 7.4V nominal voltage LiPo battery.

All classes must use approved bodies from the Touring Car body list.

- 3.1.4 Event Schedule: There will be five, two day meetings.
- 3.1.5 Friday: Track Closed.
- 3.1.6 Saturday: Drivers Briefing, 3 Practice rounds, 3 Qualifying rounds.
- **3.1.7** Sunday: 1 Practice round, 2 Qualifying rounds, 3 Finals rounds.
- **3.1.8** Tyres: A single approved control slick tyre and a single approved control treaded tyre for the wet will be voted on from an approved list compiled by the section committee. This vote will take place annually by the competitors of the previous year's championship. Competitors will be allowed to use the following number of tyres:
- 3.1.9 Three sets of slick tyres.
- 3.1.10 Two set of treaded tyres.
- **3.1.11** Qualifying: Round by round qualifying will be used. Each competitor's three best scores out of a possible five will be counted.
- **3.1.12** Finals: Each competitor's best two out of a possible three final race results will be counted.
- **3.1.13** The winner of the National Championship series will be crowned the BRCA [year] [class] National Touring Car Champion.

## 3.2. WINTER NATIONAL - INDOOR

- **3.2.1** The Winter National will be a single meeting Venue to be chosen by the section committee.
- **3.2.2** There will be a maximum entry limit to 120 competitors. Date to be determined section committee.
- **3.2.3** Event to normally take place between 1st December and 1st April.
- **3.2.4** Classes to be as per the previous year's National and Clubman (Outdoor) Championship.

- **3.2.5** The event will run to the following schedule:
  - (i) Saturday Doors open midday. Two (2) controlled practice rounds and two (2) qualifying rounds.
  - (ii) Sunday Two (2) qualifying rounds. Three (3) rounds of Finals.
- **3.2.6** If the total entry number is less than the maximum limit, the schedule may be adjusted accordingly to include additional rounds of practice or qualifying.
- **3.2.7** Round by round qualifying to be used. A competitor's best two (2) points scores will determine the overall qualifying positions. Tie breaks to be as per Section 4.
- **3.2.8** For all finals, each competitor's best two (2) out of a possible three(3) final positions will be counted.
- **3.2.9** Controlled tires to be determined by the section committee. Each competitor may use a maximum of two (2) sets of four (4) tires for the qualifying and finals rounds. Any number of tires may be used for the controlled practice rounds and do not count against this limit.
- **3.2.10** The winner of the A Final for each class will be crowned the [Year] BRCA Winter National [Class] Champion.

### 3.3 CLUBMAN NATIONAL CHAMPIONSHIP - OUTDOOR

- **3.3.1** Venues to be chosen by an online vote of drivers who participated in at least the minimum number of counting rounds in the previous season.
- **3.3.2** Event Entry: Each meeting will have a maximum of 12 heats. Entry fee £13 per meeting. (£9.50 going to the host club. Any remainder, after booking fees will go to the section funds.) The host venue may charge any amount up to £5 per driver for Saturday practice.

Entries will open on 1st February each year.

#### 3.3.3 Classes:

- '13.5t' for 13.5t brushless motors with maximum of 7.4V nominal voltage LiPo battery with Open ESC.
- '17.5t' for 17.5t brushless motor with maximum of 7.4V nominal voltage LiPo battery with Blinky ESC.
- F1 run to BRCA outdoor rules as published on the BRCA website.

All Touring Car classes must use approved bodies from the Touring Car body list.

- **3.3.4** Event Schedule: There will be a maximum of seven, 1 day meetings.
- 3.3.5 Friday: Track Closed.
- **3.3.6** Saturday: Track available for practice as published by the host club. Practice format to be determined by the host club, though it is recommended that classes with substantially different car speeds run in separate sessions.

- **3.3.7** Sunday: At least 3 Qualifying rounds, 2 Finals rounds. This may be extended to 4 rounds depending on the number of entries.
- **3.3.8** Tyres: Two sets of approved control slick tyres and two sets of approved control treaded tyres to be allowed per competitor.
- **3.3.9** Qualifying; Round by Round Qualifying will be used. Each competitor's two best scores out of a possible four will be counted.
- **3.3.10** Finals: Overall meeting final results (for trophy purposes) will be determined by adding the two final results together.
- **3.3.11** The winner of each of the Clubman championships will be crowned the BRCA Clubman [year] [class] Champion.

#### **GENERAL RULES**

- **3.4** Event Entry: Competitors entering any BRCA Sanctioned Event must be a BRCA member.
- **3.5** Once booking in closes the number of finals is set e.g. 55 rounded up to 60 = 6 finals for that class.
- **3.6** A competitor may only enter one Touring Car class per meeting.
- **3.7** All entry fees must be paid in advance and entries will not be accepted until payment is received. Late entries will be accepted after the normal closing date but the qualifying heat which late entry competitor's are placed into is at the discretion of the Race Director.
- **3.8** Entry cancellations must be notified directly to the Competition Secretary. Providing written notice is received at least seven days prior to the event. A 70% refund of the full entry fee will be provided.
- **3.9** No Shows Any driver not turning up at an event and not notifying the Committee in advance will have their entry withdrawn from the next event they are booked into. The entry will be reinstated on payment of a penalty fine of £10 or on receipt of a satisfactory explanation of the mitigating circumstances the committee must receive this information at least seven days before the next event.
- **3.10** All drivers must confirm their arrival to the race director before the end of open practice. Once qualifying begins, competitors shall stay in the race computer even if they decide not to race.
- **3.11** Prize Giving: There will be a results presentation at the end of each event. The host club will provide trophies for the top 3 in each 'A' final. The winner of each subsequent final will receive a trophy with 2nd and 3rd receiving a token prize. There will be trophies for TQ in each class. All juniors will receive a junior placing trophy determined by their final position.
- **3.12** The section will fund end of season Championship trophies for the top five in each class.
- 3.13 Track Requirements: Track width must be at least 2.4m at the narrowest point. The start

line and timing loop must be identified on the track. There will be a designated 'pull-off' area and a designated 'stop-go' area.

- **3.14** At Sanctioned Events, BRCA membership cards or proof of membership may be required to be shown.
- **3.15** Applications to host a Sanctioned Event must be received by the 1st September. Applications must include full details of the venue, including: pitting area, toilet facilities, rostrum design/suitability, race control facilities, local accommodation and policy for camping/caravans. Details of standards required can be obtained from the Section Secretary.
- **3.16** The calendar for all Sanctioned Events will be decided by the Section Committee and published as soon as possible online following the online vote.
- **3.17** The summer outdoor National and Clubman National series will run each year between 1st April and 30th September.

### 4. QUALIFYING SYSTEMS

**4.1** The start of each qualifying heat will use a 1 second stagger between cars with the order being determined numerically for round 1 and then by FTQ in subsequent rounds.

Cars not at the start line once the 30 second countdown has begun or not setting off when their number is called will start in numerical order when all the other cars have left. If for any reason a car does not start, then the race time for that car will begin automatically when one of the other cars has completed its first timed lap.

- **4.2** Round by Round qualifying awards points for each competitor's position in each qualifying round individually. The highest qualifying position in each round will score one point; second place will score two points, third place three points and so on.
- **4.2.1** In the event of a tie on total points, the competitor with the BEST round score will be awarded the position (using all counting rounds until the tie is broken). If they are still tied then (from any of their counting rounds only) the fastest time will be used.

(Example) A score set 1, 2, 3 beats a 2, 2, 2. if both competitors have a 1, 2, 3 but competitor A has a fastest time of 19-301.11 and competitor B's fastest is 19-304.55, the competitor A will win the tie break.

**4.3** During qualifying, if a competitor has their race time adjusted for any reason then the round positions will be re-calculated using the new race times.

#### 5. FINAL SYSTEMS

- **5.0.1** Drivers with a higher grid position may claim their preferred space on the rostrum.
- **5.0.2** Finals are to be run in the same order as qualifying rounds.

- **5.0.3** In the event of cars arriving at the grid once the 30 second countdown has begun, the countdown should be stopped, offending cars placed at the back of the grid and the countdown restarted from the 10 second mark.
- **5.0.4** Finals will use a grid start of two rows of cars spaced at 3m intervals on a staggered grid. The top qualifier is to choose their preferred side of the grid from which to start. This choice will be used for all subsequent finals of that class.
- **5.0.5** Cars must start behind their grid line and with at least one front wheel within the confines of the width of the box.
- **5.0.6** An audible signal will start each final.
- 5.1 Multi-Leg Finals.
- **5.1.1** Races will consist of 10 cars except for the lowest final which may run less. The winner of each final gets 1 point; the second gets 2 points and so on. Cars that do not start or are disqualified will be awarded last place in their final.
- **5.1.2** In the event of a tie on total points the competitor with the lowest counting final round scores will be awarded the position. If they are still tied then the competitor with the highest grid position will be awarded the position. Example: A 1&3 beats a 2&2. If both have a 1&2 then the grid position will be used to break the tie.
- 5.2 Single Leg Finals.
- **5.2.1** Races will consist of 10 cars except for the lowest final which may run less.
- **5.2.2** The fastest time in the final will be awarded 1st position and so on down to last place. In the event of a tie the competitor with the best grid position will be awarded the position.
- 5.3 'Reedy Race'.
- 5.3.1 Races will consist of 8 cars per race
- **5.3.2** Eight races per driver.
- **5.3.3** Drivers should not race each other twice.

# 6. CHAMPIONSHIP POINTS / MEETING RESULTS

- 6.1 National Championship.
- **6.1.1** 150 points will be awarded to first place overall in the A final, 149 points will be awarded for second place, 148 for third place and so on down to last place at the event.
- **6.1.2** All events declared by the committee as counting towards the championship will be used in the calculation of championship scores. A competitor may consider their best scores from 50% of the events declared, plus one, with halves rounded down.
- **6.1.3** In the event of a points tie in the Championship, only results from the competitors counting championship rounds will be used to break the tie. The following order to break the tie

will be used until a decider is found:

- A) The highest round score will be considered (and so on down if required) until one driver has a higher score than the other (150 beats 149 etc), If no decider then,
- B) The number of firsts, seconds, thirds, etc. final leg results will be compared (the best 2 final positions per meeting), If still no decider then,
- C) The qualifying positions will be compared until one driver has a higher grid position.

If still no decider then dependent on which championship the tie applies to one of the following will be used....

## In the National championship;

D) The number of first, second, third etc round-by-round scores (the 3 counting round scores) will be compared until one competitor has a better round score. If this fails to break the tie, the position will be shared.

### In the Clubman National championship;

- D) If the tie still cannot be broken the position will be shared.
- **6.1.6** Trophies will be awarded to the top five in each Formula in each Class.
- **6.1.7** Two junior championships will be run per class:
  - Under 13 Under 13 years of age on or before 1st October of the current championship year
  - Under 17 Under 17 years of age on or before 1st October of the current championship year
- **6.1.8** Three formula championships will also be run per touring car class:
- **6.1.9** Formula 1
- **6.1.10** Formula 2
- **6.1.11** Formula 3

### 6.2: Clubman Championship.

**6.2.1** Qualifying and finals will both count for championship points. Each leg of the finals combined with your qualifying points score will count as a separate championship round, (e.g.  $7 \times 10^{10}$  Clubman events with 2 leg finals =  $14 \times 10^{10}$  Clubman championship rounds). Each rounds points score will be calculated by adding the qualifying points ( $150 \times 10^{10}$  for TQ,  $149 \times 10^{10}$  for 2nd etc) to the points scored from each of the two finals. (e.g. If you TQ the meeting ( $150 \times 10^{10}$ ), finish 2nd in final leg 1 ( $149 \times 10^{10}$ ) and finish 5th in final leg 2 ( $146 \times 10^{10}$ ) then your round scores will be ( $150 \times 149$ ) =  $150 \times 10^{10}$  for Rd1 and ( $150 \times 146$ ) =  $150 \times 10^{10}$  for Rd2 of the Championship.

- **6.2.2** For trophy presentation at the end of the day both final scores only will be added together and a meeting winner announced, any tie-break will be decided on best final finishing position (e.g. a 1+3 beats a 2+2) if still tied then qualifying position will be used.
- **6.2.3** Overall Clubman championship winner and any potential tie breaks will be calculated using the rules set out in 6.1.2 and 6.1.3
- **6.2.4** Two junior championships will be run per class:
  - Under 13 Under 13 years of age on or before 1st October of the current championship year
  - Under 17 Under 17 years of age on or before 1st October of the current championship year
- **6.3** Constructors/Team Championship (National event only): An annual National Constructor's trophy will be awarded.
- **6.3.1** Teams of drivers must be nominated before the first meeting.
- **6.3.2** The three highest placed drivers for each manufacturer will score points for qualifying and finals at each event.
- **6.3.3** The top qualifier will score 30 points for his/her manufacturer. The second placed qualifier will score 29 points for his/her manufacturer and so on. The same scoring system is used for the overall finals results as well. If, for example, the 4th highest placed 'Schumacher' driver is placed higher than the 3rd highest placed 'Associated' driver, then the 'Schumacher' driver would not score any constructors points but the 'Associated' driver would.
- **6.3.4** The three scoring drivers may well be different for qualifying and finals depending on the overall positions.
- **6.3.5** All 5 rounds count towards the championship.
- **6.3.6** In the event of a points tie the highest individual round score is used to decide the higher placed constructor.
- **6.4** At all BRCA Championship meetings, up-to-date championship positions should be displayed. A copy of the BRCA rules must be available

## 7. INTERNATIONAL CHAMPIONSHIPS

**7.1** Team selection for international events will be based on the previous year's national championship results, subject to those being eligible sending the section the entry fee required to enter that competition. If a competitor who is eligible cannot or has not sent the entry fee by the 1st February, the next eligible person on the list will be asked if they wish to attend. Once entry has been confirmed there will be no refunds for cancellation, if a competitor withdraws from an event and a suitable replacement found, the replacement competitor will reimburse the

withdrawn competitor's full entry fee.

- **7.1.1** There will be two wild card entries left open to be selected by the Committee.
- **7.2** If the BRCA has any Official Team Clothing available, all competitors representing the BRCA at any international event, must wear this clothing for any Opening Ceremony.

### 8. RACE OFFICIALS

- **8.1** A Committee member will be appointed as the BRCA Steward for the meeting; the Steward will have overall authority regarding compliance to the rules and regulations and may be called upon to resolve any dispute.
- **8.1.1** A Race Director or Timekeeper must be present at race control throughout the timed heats and finals at national events. Unless otherwise stated the race director will also act as referee.
- **8.1.2** A Technical Officer who will check that technical and eligibility rules are upheld will be available at national events.
- **8.1.3** A Timekeeper will check that the timing equipment is operational and that all races have started and finished in accordance with the rules.
- **8.2** Referees may be used for qualifying heats and finals. Referees will be selected by the BRCA committee.
- **8.3** The Referees will monitor driving standards and competitor behaviour.
- 8.4 A Referee's decision is final and may not be protested.

#### 9. RACE PROCEDURES

- **9.1** The maximum number of cars per race shall be 10. Finals and grid positions are to be determined by a driver's final qualifying position.
- **9.2** Competitors who have raced in the National championship in the past will be graded on their previous % championship grading assuming that they are racing in the same class. Drivers who change class will have a 15% decrease applied to their % if changing class. New drivers to the championship will be graded at 1% when they enter their first meeting in the championship (it is at the committee's discretion to waive this in exceptional circumstances). If the driver has not raced in the championship for 3 seasons then they will be classed as a new driver.
- **9.2.1** Driver grading will be based on championship position counting half plus one (with halves rounded down) of the completed rounds.
- **9.3** The Race duration will be five minutes, plus last lap allowance.
- **9.4** In severe weather conditions the Race Director is responsible to ensure that the track is in a suitable condition to race on.

- **9.5** Practice rounds will be controlled and limited to slots of no more than 6 minutes duration. The rostrum shall be cleared of drivers at the end of each slot. Drivers of different classes shall not practice at the same time. Control of this practice session is to be determined by the BRCA Committee.
- **9.6** After each race, the competitor in that heat will have their cars placed into technical impound and assume assigned marshalling positions for the following heat. No other person is allowed within the track area (except officials) while the race is in progress.
- **9.7** An AMB/MyLaps system is to be used for timing and results should be determined based upon the accuracy specified in the club handbook (recommended to be the same as published by the timing equipment manufacturer).
- 9.7.1 Only Personal Transponders supplied by each competitor will be used to record laps.
- **9.7.2** At all sanctioned events it is the driver's responsibility to securely fit the lap recording equipment to their car before the start of any race.
- **9.7.3** Competitors using a personal transponder are responsible for ensuring that such equipment functions with adequate signal strength. If this equipment malfunctions, competitors may have their laps recorded manually providing that:-a) The transponder starts the race clock for that race.
- b) An official is satisfied that the car was circulating during any missed laps.
- c) If the personal transponder does not record a finishing time, then final lap(s) can be awarded at maximum lap time for the driver in that race, until the total race time has been reached.
- **9.8** During a race, the only people who can pass any information to a competitor are the Race Director (or their assistant), Referee or commentator. Receiving information from an assistant will result in a loss of that heat/final time. Competitors may pass on information to each other on the rostrum regarding cars that have stopped on the circuit.
- **9.9** Only the Race Director, Timekeeper or a Referee may call for a restart of a race within the first lap of the leading car. If a race is abandoned after the first lap of the leading car then time must be allowed for recharging.
- **9.10** At the race end, when the cars have passed the finish line, and the finish signal has been given, the cars must pull off into the designated pull-off area, so as not to interfere with any other competitors. Failure to comply will result in a penalty.
- **9.11** If a race is abandoned, only cars running at the time the original race was aborted will be allowed to restart.
- **9.12** National Meetings can only be abandoned by a majority decision of the BRCA Committee members present.
- **9.13** No active mobile phones are allowed on the drivers' rostrum nor are they allowed to be used within the track area.
- 9.14 Any race or heat stopped due to race equipment malfunction or an Official's error will be

re-run after a suitable delay.

- **9.15** Any race notified by race control as being delayed from the published timetable to either qualifying or finals will receive a minimum of 15 minute's notice prior to assembling on the grid.
- 9.16 BRCA Section to supply scrutineering aids for all National events.
- **9.17** Clubs running National sanctioned meetings are encouraged to provide commentary at the meeting, to cover finals as a minimum.
- 9.18 A club provided public address system is to be used.
- **9.19** All race venues must provide suitable ladies and gents toilets that must be open from when open practice starts and until the trophy presentation has finished.
- **9.20** A pegboard will be used during open practice for non 2.4GHz drivers.

#### 10. DRIVERS FORMULA CALCULATION

- **10.1** A competitor's formula is calculated each year using the championship positions at the end of the previous year's BRCA sanctioned series.
- **10.2** Formula license grades will be allocated on a percentage basis as follows: the number of drivers that score points for the minimum number of events for the series will be used as the base figure.
- **10.2.1** F1 The top 33% of the base figure is used against the final series' results to determine the F1 drivers.
- **10.2.2** F2 The next 17% of the base figure is used against the final series' results to determine the F2 drivers.
- **10.2.3** F3 The remaining 50% of the base figure is used against the final series results to determine F3 drivers.

## 11. MARSHALLLING

- **11.1** Competitors will be expected to marshal the race after their own, with competitors in the last race of a round expected to marshal the first race of that round.
- **11.2** Penalties will be applied for late marshalling or failure to marshal.
- **11.2.1** Failure to or late marshalling is clarified as being any marshal not at the correct position when the first car leaves the start line or final grid (unless the marshal is under instruction from a race official)
- **11.3** Drivers are allowed to provide a competent substitute marshal, but the Race Director must be notified and approve of any change first. Substitute marshals must be current BRCA members. The driver will be subject to any penalties incurred by their substitute marshal.
- 11.4 Marshalls must have their hands free at all times.

- **11.5** Marshalls must wear safe and sensible footwear that will not become detached when performing marshalling duties. (Open toe shoes or sandals are not acceptable).
- **11.6** At sanctioned events it is not mandatory to marshal open practice sessions.
- **11.7** Marshall points (posts) are carefully positioned by the event organisers, if any competitor feels that the marshal points are unsatisfactory, they must inform Race control.

#### 12. PENALTIES

- **12.1** Referees are empowered to give driving and marshalling penalties. All other penalties will be given by the Race Director and/or BRCA Steward.
- **12.2** Jump Starts in Finals: After the 10 sec. count-down to start signal has started, any car moving ahead of the Grid line before the official start signal will be penalised:

Up to one meter - ten seconds

More than one meter - one lap.

Penalty to be applied after the race has finished.

- **12.2.1** If there are multiple 'jump starts' at the start of a Final, the referee can call for a restart and may decide not issue any penalties arising from the original start.
- **12.3** Driving Standards; for a first offence the Referee will normally issue a clear warning. The Referee will clearly announce any penalty and record it on the published results for that heat/final. At the Referees' discretion, penalties can be incurred for bad driving and/or corner cutting with any one of the following, depending on the severity of the offence:
  - Official Warning
  - Stop-Go penalty
  - 5 or 10 second penalty
  - 1 lap penalty
  - Disqualification.
- **12.3.1** A driving penalty of one lap deduction may be awarded if any car continues to circulate the track after having received the finish signal, and especially so if that car in any way interferes with a competitor still racing.
- **12.3.2** The Stop-Go penalty area must be well defined and in a position that is practical to operate.
- **12.4** Failure to or late marshalling in qualifying will receive a penalty of loss of your best points score from qualifying.
- **12.4.1** Failure to or late marshalling of a final leg will receive a penalty of loss of your best points score from the finals.

- **12.4.2** A second marshalling infringement during the same event will result in disqualification and the allocation of 1 championship point for that event.
- **12.4.3** All marshals must remain on their marshalling points until released by the following marshal or the race director. Failure to do so will be classed as failure to marshal.
- **12.5** Any driver who ignores a warning or penalty issued by the officials will be disqualified from the race.
- **12.6** A driver will be permitted a maximum of three penalties per event, for a 4th infringement they will be disqualified from the event and allocated 1 championship point for that round.
- **12.7** The Referees' will not give a penalty for accidental corner cutting provided sufficient time is spent stationary so that no advantage is gained.
- 12.8 Any penalty incurred for any reason will be carried into any subsequent re-run.
- **12.9** Competitors exiting or entering the rostrum platform area while a race is in progress will be disqualified from that race. Race 'in progress' is clarified as from: 'when the first car is started (all cars in Finals)' to 'the race is declared over'.
- **12.10** Any failure to present the car to scrutineering, before/after the race in which the car has raced, or any failure to meet the technical and dimensional requirements of these rules before or after a race will result in the loss of that race time.
- **12.11** Any competitor found to be using illegal equipment may at the Race Director's discretion be disqualified from the meeting and subject to appearing before the Committee, may be disqualified from participating in any other BRCA sanctioned event/s.

## 13. PROTEST PROCEDURES

- **13.1** A referee's decision (or non-decision) is final and may not be protested.
- **13.2** Protests must be received by the Race Steward within 20 minutes of the end of the affected race; they must be on the official protest form (available from race control) with a fee of £25 which will be refunded if the protest is upheld. The Stewards decision is final.
- **13.3** National events will have a Drivers Association Representative appointed, who will advise and (if required) represent any driver who has cause to query any official decisions or procedures.
- **13.4** Any queries concerning official lap times and scores will be addressed to the BRCA Steward. A protest fee is not required. Any adjustments will be ratified with the Race Director and their decision in these matters is final.

### 14. CURTAILMENT OF EVENTS

- **14.1** In the event of any of the rules in this section being invoked these rules shall take precedent over any other rules which they may contradict.
- **14.2** Non-national Sanctioned events may be abandoned by the Race Director in consultation with the Organisers. Results from any round can only be used if all races for that class in the respective round have been completed.
- **14.3** National championship events can only be abandoned by a majority vote of the Committee members present after consultation with the Race Director. In the event of a National meeting being abandoned the following will be applied to determine the meeting results:
  - After 1 round of qualification the meeting results would be declared on qualification positions after this round.
  - After 2 rounds of qualification the meeting results would be declared using round by round points with 1 round counting.
  - After 3 or 4 rounds of qualification the meeting results would be declared using round by round points with 2 rounds counting.
  - After 5 rounds of qualification (but no finals run) the meeting results would be declared using round by round points with 3 rounds counting.
  - After 1 round of finals, then the points will be awarded as normal for this round of finals, and a second set of scores for finals will be awarded based on the qualification positions.
     The final positions will be determined using both of these scores with tie breaks resolved in the normal method for finals.
  - After 2 rounds of finals, the scores from these 2 rounds will be taken, and a 3rd set of scores will be awarded based on qualification positions. These 3 scores will then be evaluated in the normal way, and tie breaks resolved using the normal method.

In the event of the meeting being abandoned mid way through a round of qualification, the points for that entire round will be scrapped and results declared from the previous completed round as described above. If the meeting is abandoned part way through a round of finals, points will be awarded to finals that have been completed with any subsequent finals not run in that round will have points awarded as per qualification results.

14.4. Events abandoned when at least one qualifying round has not yet been completed will not be rescheduled and the total number of counting championship rounds will be reduced by one.

#### 15. GENERAL RULES

- **15.1** It is each competitor's responsibility to ensure that their car meets all technical and eligibility requirements.
- **15.2** The Section 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.
- **15.3** 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.
- **15.4** The body and chassis must be securely joined at all times when the car is on the track.
- **15.5** All cars must have a minimum of one identifying numbers to the front windscreen.
- 15.6 Only one drive motor is allowed per car.
- **15.7** Tyre treatments that can coat or damage the racing surface are specifically banned.
- **15.7.1** The use of tyre treatments is at the race organiser's discretion. Notification of non-allowable tyre treatments must appear on the entry forms.
- **15.7.2** The use of any oil of wintergreen-based product (i.e. smells of 'Deep Heat') is not allowed.
- **15.7.3** No tyre treatments are allowed in wet conditions.
- **15.8** The use of multiple-speed transmissions (gearboxes) is not allowed.
- 15.9 Traction control is not allowed.
- **15.10** Active suspension is not allowed.
- **15.11** Gyroscopes are not allowed.
- **15.12** Slipper clutches are not allowed.
- **15.13** Suspension movement sensors are not allowed.
- **15.14** Wheel speed sensors are not allowed.
- **15.15** Tyre slip sensors are not allowed.
- **15.16** Bodyshells : new bodyshells must be approved by the BRCA 1:10 Electric Circuit Chief Scrutineer. Approval lists to be published on the BRCA website.

Two lists will be maintained, "Touring Car" and "GT". To be added to the appropriate list, a body must be representative of a 'full size' Touring Car of GT (Racing version or Road going).

For the Touring Car list it must also meet the current Global Body Spec dimensional requirements (Appendix 1). Body shells will have a 5 year approval date, after which if still in

production will have to be resubmitted. At all times body shells must be commercially available.

- **15.16.1** Bodyshells may be added to the homologation list at any time subject to approval.
- **15.16.2** Each manufacturer must pay a registration fee of £50.00 and anybody being submitted for approval must pay a levy of £10.00 per body. Any new bodies being submitted must have the part number moulded into the front windscreen.
- **15.16.3** Bodies submitted for approval will be kept by the Section for future reference.
- **15.17** 240v portable Generators may be used at competitors own risk at BRCA National events. Hosting clubs will designate a "generators free" area with free access to track & facilities.

### 16. TECHNICAL RULES -TOURING CARS

- **16.1** No holes or slots are allowed on the body or wing, except for body post, aerial and transponder holes.
- **16.2** Windows are to be left clear and unpainted.
- **16.3** The main chassis cannot be changed during a race.
- **16.4** Under body/chassis aerodynamic aids of any nature are not allowed. Smooth Lexan under trays may be fitted to waterproof the cars.
- **16.4.1** Details of all front and rear lights plus the main front grill must be clearly contrasted from the surrounding paintwork. Windows are to be left clear and unpainted.
- **16.5** Touring Car Dimensions:

Min (mm) Max (mm)

Wheelbase 250 270

Width (without body) 170

190 Width (with body) 175

200

Length (inc. body and wing) 360 460

Wheel dia (excl.tyre bead) 46 50

Wheel width inc.bead 18 26

Tyre width (across sidewalls) 27

Tyre diameter (when mounted on wheels) 52 67

Ride height (indoors only/checked on flat surface) 5

**16.5.1** Touring Car Body Dimensions: Overall Wing size Inc endplates (WxDxH) 190x40x20Max (mm) Wings (excluding endplates) are to be of single moulded construction (no flat-packs/bend your own) and to be mounted directly to the body (no spacer between shell and wing), on the mounts provided at the back of the shell. All features (front splitter / bumpers) from the original moulding must remain on the shell.

- **16.6** The minimum car weight, including personal transponders is 1350g.
- **16.7** The use of tyre warmers is allowed but they may not be used/brought into the defined race/track area.
- **16.8** Control Tyres will be easily identifiable with a permanent external marking that can be used as a reference .This marking will include the manufacturer's name on the sidewall plus either (or both) the tyre compound number or tyres identification name. The maximum price of four controlled tyres will be £24.99 (slick) and £29.99 (wet). All tyres must be available via shops in the UK two months before the start of the championship.
- **16.9** Any Competitor being suspected of not running the correct tyre build will have their tyres destructively checked at the end of the event. If the tyres are found legal, the competitor will have the full set replaced by the section.
- **16.9.1** If any competitor is found using any other wheel/insert/tyre other than which should be used, they will be disqualified from that event.
- **16.10** At sanctioned events all wheels/tyres must be marked, the process will be advised at each meeting by the appropriate officials. Markings must be clearly visible. Penalty for failure in scrutineering for a non-performance related failure, namely no grills or lights etc. will result in warning and not a time or points penalty.

#### 17.0 TECHNICAL RULES GT10 & FORMULA 1 CLASS

- 17.1 Rules for the GT10 and Formula 1 Class's are to be maintained on section website.
- **17.2** Class's for GT10 and Formula 1 class will be promoted by the controlling section committee by organising and promoting a BRCA championship subject to sufficient interest and subsequent entries being received.

#### **18.0 MOTORS**

- **18.1** At Sanctioned events, only motors that are currently homologated and listed by the BRCA Electric Board are allowed. Full technical data of homologated motors is available via the BRCA Electric Board Website.
- **18.2** Open Modified Brushless Motors any modified brushless motors approved by the Electric Roard are allowed.
- **18.3** 10.5t Brushless Motors only 10.5 turn stock spec brushless motors approved by the Electric Board are allowed.
- **18.4** 13.5t Brushless Motors only 13.5 turn stock spec brushless motors approved by the Electric Board are allowed.
- **18.5** 17.5t Brushless Motors only 17.5 turn stock spec brushless motors approved by the Electric Board are allowed.

- **18.6** 21.5t Brushless Motors only 21.5 turn stock spec brushless motors approved by the Electric Board are allowed.
- **18.7** Any driver 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.

#### 19. BATTERIES

All Touring cars will be powered only by batteries approved and homologated by the BRCA Electric Board. Full technical data of homologated batteries is available via the BRCA Electric Board Website.

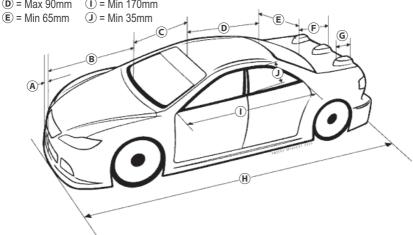
- **19.1** Any driver found abusing their batteries at BRCA sanctioned meetings may be excluded from sanctioned events for the rest of the season and have their BRCA licence removed.
- **19.2** The maximum voltage for a 2S LiPo is to not exceed 8.40 volts at any time. The maximum voltage of 1S LiPo is to not exceed 4.20 volts at any time.
- **19.3** All LiPo/LiFe cells must be charged in a closed LiPo sack. A LiPo sack is defined as a receptacle designed for the purpose of charging LiPo/LiFe batteries and of a suitable construction as to contain a LiPo/LiFe fire.
- 19.3.1 The heating of LiPo/LiFe cells is not allowed.

# 20. RADIO EQUIPMENT

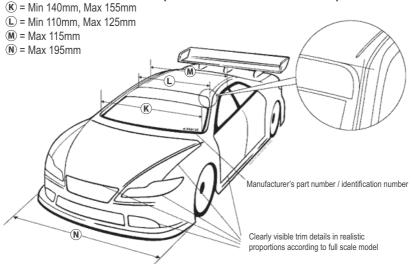
- **20.1** Only 2.4GHz, 40MHz or 27MHz frequencies are allowed.
- **20.2** Competitors using 27MHz or 40MHz must have a minimum of three frequencies available for competition use.

# **GLOBAL BODY SPEC (GBS for Electric Sedans)**

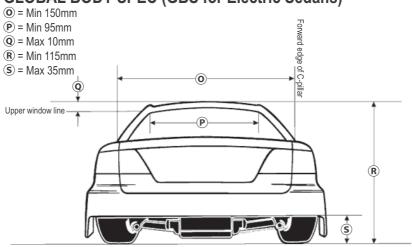
- **(A)** = Max 10mm **(F)** = Max 65mm
- **(B)** = Min 105mm **(G)** = Max 25mm (max 3 posts)
- $\bigcirc$  = Max 85mm  $\bigcirc$  H = Min 410mm
- **(D)** = Max 90mm **(I)** = Min 170mm



# **GLOBAL BODY SPEC (GBS for Electric Sedans)**



# **GLOBAL BODY SPEC (GBS for Electric Sedans)**



# Notes



