

General Rules

Heats and finals, Races to run in 5 Minute heats and 5 Minute finals.

Cars to race on a standard stock car oval.

All meetings shall be run on carpet. No tyre additives allowed.

Heats to be formatted as per the race director's decision.

Maximum number of cars in all heats and finals will be 8.

Cars must line up two abreast in graded order at designated places around the track. In finals cars must line up in grid order.

Qualifying format to be 3 or 4 heats to be raced with the worst round dropped.

Lap scoring at all meetings to be carried out by a reliable efficient system provided by the club.

Queries concerning lap times and scores posted should be addressed to the race controller.

The driver shall be responsible for obtaining and fitting the correct transponder in his/her car for the race.

Only the driver involved may question his/hers lap scores. Any junior member can be represented by a parent or guardian

Scrutineering will be carried out at the beginning of the day before practice. Lipo checks, ride height and weight before each heat and finals

(a) Failure to present your car to scrutineering when requested or to comply with construction rules will result in loss of FTQ/Final position.

(b) No decision of the Club's own scrutineer can be overturned without a fully notarized committee meeting by any other member of the committee.

Any motor changed at a meeting to be approved by the scrutineer.

Radio Control Equipment:

a) It is the driver's responsibility to ensure that their equipment does not cause interference to others, and that his/her receiver is not faulty.

b). Only legally approved frequencies are to be used.

c). Drivers must be able to provide alternative frequencies if 27 meg or 40 meg is used.

d). All frequency changes MUST be reported and approved by race control.

External battery packs for radio transmitters are not allowed.

Open practise and frequency management will be at the club's discretion

Any driver claiming interference must switch off and see the race director while the race is still in progress.

At the discretion of the race controller/club chairman any competitor found with equipment causing interference will be disqualified

Any bodies entered into Concourse events must be run for the duration of the meeting, as scrutineered. The judging to take place by a person nominated by the committee, and judged before racing.

If the bodyshell becomes loose or falls off during a race, the car MUST be removed from the track until the bodyshell is securely re-attached, except Bangers.

Any car losing a wheel or tyre during a race must be removed from the track and have that wheel or tyre refitted to be eligible to re-join the race.

Any repairs to vehicles MUST be affected OFF the track.

Any car receiving assistance of an unfair nature (i.e., being pushed along the track or over the Finish line) will be disqualified.

Meeting to comply fully with the as above race procedures, unless exceptions are specifically agreed by the committee.

The driver's roof grade to cover a majority of the roof.

Roof grading. Car to use their national roof grade. If they have never raced a national before, they use their club grade until their first national grading

All cars must have the correct roof grade at all times. Failure to comply will result in a points deduction from the meeting that the roof grade was incorrect. Final decision will be at the race director's discretion.

No protest shall be accepted after any prize-giving ceremony.

Marshalling: all Drivers to marshal the following heat to which they have raced.

b). Any driver not fulfilling his/her marshalling obligations will be penalised by loss of FTQ/Final Result.

c). Drivers must arrange a competent substitute if they are unable to for any reason.

d). Marshals must remain at their marshalling point at all times for the duration of the following race.

e). Any driver leaving the meeting before his/her marshalling duties are fulfilled, will be disqualified with the loss of all points from the meeting.

Non-racing personnel must not block the vision of, or walk in front of the drivers/marshals whilst the race is in progress. Failure to comply will result in loss of lap scores, or to be expelled from the meeting.

Code of Conduct: - 'Any Committee member can bring to a drivers attention any misconduct by him/herself or his/her pit crew and may penalise the offending driver at the discretion of the committee.

Drivers or pit crew members who do not observe rule (31) will be disqualified from the meeting.

All drivers should be standing in the club's designated drivers area. Designated driver areas are to include an area around two corners if there is room to do so.

Drivers to allow room at the central position of the rostrum area so wheelchairs and/or walking aided members are able to see. Club's may have additional or alternative practices in place

Finals must be started from the grid, once the final has started cars are not permitted to join the race. If they started the race from the grid they are allowed to rejoin the race after repair.

Race fees: - fees are the same for all classes £12 for adults and £10 for juniors (aged under 16 at the start of the first round of the national series and will stay as a junior for that season) . each additional class will be £2 per car adult and junior.

Construction rules for all classes

No car shall be constructed so as to be dangerous to persons or cause damage to competitor's cars or to the track surface. No sharp or protruding objects are allowed on the cars.

Body and chassis must be securely joined at the start of the race and must remain on the car during the race. When initially entered at a meeting the body shell must be neatly finished and complete.

Steel whip aerials and rollover masts are not allowed.

Tyres must be foam, you can change them from, Tyre additives are not allowed.

The use of multiple speed transmissions (gearboxes) Are not allowed

There is a minimum ground clearance of 3mm ;this includes any protruding screws, 1mm clearance for spur gear. Screws must also match the hole in the chassis.

Countersunk screws have to be fully sunk into the chassis.

Limited slip devices and differentials of any kind are not allowed, solid rear axle only.

All cars must have reverse fitted and working at the start of every race.

Cars are to be powered by either a brushed motor with batteries of nominal voltage 4.8/7.2v according to class or a brushless motor and batteries with a maximum voltage of 4.2v which are defined below.

Batteries and motor combinations allowed

Brushless system

Ministox = 17.5t brushless motor

Hotrods = 13.5t brushless motor

Saloonstox = 10.5t or 13.5t brushless motor

Definition of a brushless motor

17.5, 13.5 and 10.5 brushless motors - With a Maximum UK Recommended Retail Price of £65.

Definition of a zero-timing speed controller

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." Brushless Speed Controllers built without automatic or programmable timing advance will be allowed. The BRCA 12th Electric Oval Committee will provide a list of eligible speed controllers. Details of the requirement for the approved mode are contained in Appendix 1 – Zero-Timing Brushless Speed Controllers – and this requirement must be met for a speed controller to be eligible for racing. When using a sensorless speed controller/brushless motor combination the rule above does not apply.

All cells used in any competitions MUST be hard - cased. Soft cases or no cases are NOT allowed. Cars with Brushless Motors will be powered by cell/s with a maximum nominal voltage of 3.8v with a max charge voltage of 4.2V and a max charge rate of 10A

Definition of a brushed motor

Motors allowed– Core21, Saturn 20t and Kamtec k21 motors. These must remain unopened, and unmodified - External motor bearings are NOT allowed. Motor cleaning fluids / additives are allowed.

Brushed system:

Cars with Kamtec k21 Core21 Saturn 20 Brushed motors will be powered by sub C size batteries with 1.2v nominal voltage per cell, in either 4 cell 4.8v or 6 cell 7.2v format

Using either mechanical or electronic speed controller

Saloon Stox = 6cell 7.2v Nominal.

Mini Stox, = 4 cell 4.8v Nominal

1300 Stock Cars = 4 cell, 4.8v Nominal.

Construction Rules Bangers

1300 stock car Construction Rules 2023

- 1) Body to be ABS and a reasonable representation of a full size 1300/1400 stockcar. Spoilers are not permitted. Shells to be of a 'hot hatch'/'cc' style no estates or saloon styled shells. Windows Must be fully cut out.
- 2) The chassis component will consist of one continuous sheet of aluminium or glass fibre-reinforced plastic only. Chassis must extend from a minimum 10mm ahead of the front axle line and runs continuously along the car to end a minimum of 25mm behind the rear axle line. winged style chassis is permitted provided it is available in a kit from i.e. Kamtec/mardave/tic/large.
- 3) Mardave/ Kamtec type rear pod base plate, pivot ball and standard V12 spring location, or equivalent parts in shape and construction and mounting locations. 2 rear springs only.
- 3a) Standard Mardave/Kamtec A-arm style front wishbones Only. To be made of plastic only no alloy. NO zen, Schumacher, Rsgt, Rxgt, Atom, venom style parts are to be used. (GT12 parts not eligible).
- 4) External plastic bumpers to be fitted to the chassis front and rear. Front to be grid & representative of a fullsize stock car. Min height of 25mm and max height of 35mm from chassis to top of the bumper. If a single rail rear bumper is used, it may be spaced up from the chassis. Spacers to be a max length of 8mm. If a grid bumper is used on the rear it must follow all rules of the front bumper. Fixings are not included in height measurements.
- 5) Overall maximum width of the rolling chassis to be 160mm (178mm including body and bumpers).
- 5a) Wheelbase of 205mm +/-5mm only.
- 6) Materials used in the rolling chassis may only be steel, brass or aluminium. Special materials (such as titanium or carbon) are not allowed. Brass and lead only may be used as identifiable weights.
- 6a) Chassis must not have any extra holes drilled or added to allow extra 'flex' in the chassis component and that the chassis must be a solid design not slotted to achieve extra movement.
- 7) Damper tubes are not allowed. Oil filled shocks and dampers are not allowed.
- 8) Front suspension may be independent provided that the suspension design does not have any pivot, rod or other mechanism that alters the wheel camber or castor in roll relative to the chassis during its full travel. and must use the standard two bolt fixing, and not modified/elongated
- 8b) Ride height/castor can be adjusted with shims/washers. Shims and washers must be made from a solid substance to be a consistent thickness start to finish and rigid. No wedge-shaped spacers or 'o'-rings are to be used on any chassis mounting points.
- 9) Rolling element (ball) bearings are allowed on the front and rear axles.
- 10) Min 25mm, max 26mm width of tyres and Max 60mm diameter no Min diameter of tyres, but the tyre must cover the entire wheel edge to edge. Tyre additives are NOT allowed.
- 11) Diffs are not permitted.
- 12) Gearing is limited to a 32dp pitch for pinion and Spur gear.
- 13) Z drives and alloy pods are permitted. height adjustable rear pods are not permitted
- 14) Any 12th scale single bolt wheel to be used, mounted onto a steel axle only.
- 15) Powered by 4cell brushed setup. cell layout is free and open for driver's choice. Motors permitted to follow the BRCA F2 motor spec and list. Currently HPI Saturn 20, Kamtec K21 and Schumacher Core21.
- 15a) Speed controller maximum RRP of £50. Electronic speed controller or mechanical Resistor type speedo controller permitted.
- 16) Steering servo to be of a maximum of £50 RRP low profile servos are permitted providing they do not exceed the RRP.
- 17) No GT12 hybrid style cars to be used.
- 18) Additional holes may be drilled for the re-mounting of the body post and aerial mast locations only.
- 19) Parts from other manufacturers may be used as long as they serve the same purpose as the part they are replacing.
- 20) Minimum ride height of 3mm.
- 21) All added weights must be bolted to the chassis with a nut and bolt.
- 22) *Scratch built cars can be used as long as they are deemed legal after regular scrutineering*

2lit saloon construction rules 2023

- 1) Body to be ABS or Lexan and be representative of full size 2 litre stock car and no spoilers allowed. Any car raced in real life 2 litre saloons past and present that shell can be used.
- 2) Any oval based chassis will consist of one continuous sheet of aluminium or glass-fibre reinforced plastic (composite) or Carbon Composite chassis that extends from a minimum 10mm ahead of the front axle line and runs continuously along the car to end a minimum of 25mm behind the rear axle line.
- 3) Rear pod may be of any material or plastic construction it should have a single pivot point at the front and two springs to the rear with a rear guide pin, ride height adjustable rear pods are allowed.
- 4) External plastic bumpers to be fitted to the chassis front and rear, front to be grid and representative of a full-size stock car.
- 5) Overall maximum width of the rolling chassis to be 160mm (178mm including body and bumpers) wheel base should be 205mm +/-10mm.
- 6) Metal materials used in the rolling chassis may only be steel, brass or aluminium. Special metals (such as titanium) are not allowed. Brass and lead only may be used as identifiable weights to meet the weight limit and when removed do not have any effect on the car's function as a rolling chassis.
- 7) Separate dampers are only allowed on the rear suspension.
- 8) 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.
- 9) Rolling element (ball) bearings are allowed on the front and rear axles.
- 10) Minimum weight is 1100g for both Brushed and Brushless.
- 11) Min 25mm. Max 26mm width of tyres and Max 60mm diameter no Min diameter of tyres, but the tyre must cover the wheel.
- 12) 3 bolt GT12/LMP style wheels are not allowed.
- 13) Diffs are not permitted.
- 14) Z drives and alloy pods are allowed.
- 15) Powered by either a 13.5v/10.5t brushless motor, with a 1s lipo battery esc must be in BLINKY mode with a max £150rrp or a 6 cell brushed setup with a Kamtec K21, Core21 or a Saturn 21 motor.
- 16) All lipo batteries are subject to a voltage test max of 4.2 volts, prior to any race at committees wishes anyone who fails the test will be not permitted to race that heat, and anybody who refuses to partake in a voltage test may also be removed from the heat/final.
- 17) Gearing is open both 32dp and 48dp are allowed z drive hubs are allowed.
- 18) Only single bolt 12th scale wheels allowed.
- 19) Tyre additives are NOT allowed.
- 20) Parts from other manufacturers may be used as long as they serve the same purpose as the part they are replacing.
- 21) Minimum ride height of 3mm.
- 22) All added weight must be bolted to the chassis with a nut and bolt except under lipo battery weights.
- 23) *Scratch built cars can be used as long as they are deemed legal after regular scrutineering*

National hot rod construction rules 2023

- 1) Cars to be representative of full size hot rods, body to be Lexan, spoilers are allowed.
- 2) Any Oval designed rolling chassis can be used provided it falls within the rules listed below.
- 3) The chassis component will consist of one continuous sheet of aluminium or glass fibre reinforced plastic (composite) or Carbon Composite chassis that extends from a minimum 10mm ahead of the front axle line and runs continuously along the car to end a minimum of 25mm behind the rear axle line.
- 4) Overall maximum width of the rolling chassis to be 165mm (178mm including bodyshell), wheel base should be 205mm +/-5mm.
- 5) Metal materials used in the rolling chassis may only be steel, brass or aluminium. Special metals (such as titanium) are not allowed. Brass and lead only may be used as identifiable weights to meet the weight limit and when removed do not have any effect on the car's function as a rolling chassis.
- 6) Separate dampers are only allowed on the rear suspension. Dampers requiring seals to prevent the egress of oil are not allowed.
- 7) 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.
- 8) Rolling element (ball) bearings are allowed on the front and rear axles.
- 9) Minimum weight is 950g.
- 10) Internal front and rear bumpers are allowed and must be foam and fitted inside the body shell only.
- 11) Min 25mm, max 26mm width of tyres and max 60mm diameter no min diameter of tyres, but the tyre must cover the wheel.
- 12) Diffs are not permitted.
- 13) Powered by a 13.5t brushless motor, and a 1s lipo battery, esc must be in BLINKY mode with a max £150rrp.

- 14) All lipo batteries are subject to a voltage test max of 4.2 volts, prior to any race at committees wishes anyone who fails the test will be not permitted to race that heat, and anybody who refuses to partake in a voltage test may also be removed from the heat/final.
- 15) Rear pod may be of ally or plastic constriction it should have a single pivot point at the front and two springs to the rear with a rear guide pin, ride height adjustable rear pods are allowed
- 16) Single bolt rear axle only, gearing is open both 32dp and 48dp are allowed z drive hubs are allowed.
- 17) Only single bolt 12th scale wheels allowed.
- 18) Tyre additives are NOT allowed.
- 19) Parts from other manufacturers may be used as long as they serve the same purpose as the part they are replacing.
- 20) Minimum ride height of 3mm.
- 21) All added weight must be bolted to the chassis with a nut and bolt except under lipo battery weights.
- 22) *Scratch built cars can be used as long as they are deemed legal after regular scrutineering*

Mini stock construction rules 2023

- 1) Body shells to be a representation of a full size Mini type car, body to be ABS or Lexan.
- 2) Chassis Must be Made from GRP (No Carbon Mix or Special Mix GRP) and have Maximum length including bumpers to be 292mm. - Overall maximum width of the rolling chassis to be 163mm. - wheel base to be 175mm +/-2mm - Chassis to be single piece & constructed in GRP only, measuring no more than 230mm in length and 100mm in width. -No suspension whatsoever, including dampers, springs, shocks, "O" rings or notching the chassis. Any holes drilled or cut must be used or filled.
- 3) External plastic bumpers to be fitted front and rear, front to be grid and representative of a full-size mini stock car.
- 4) Metal materials used in the rolling chassis may only be steel, brass or aluminium. Special metals (such as titanium) are not allowed.
- 5) Rolling element (ball) bearings are allowed on the front and rear axles.
- 6) Min 25mm. Max 26mm width of tyres and Max 60mm diameter no Min diameter of tyres, but the tyre must cover the wheel.
- 7) Standard slot drive rear wheels with the single wheel nut only. GT12/LMP style wheels are not allowed.
- 8) Diffs are not permitted.
- 9) Z drives and alloy pods are allowed.
- 10) Powered by either a 17.5t brushless motor and a 1s lipo battery, esc must be in BLINKY mode with a max £150rrp, or a 4 cell brushed esc and either a Kamtec K21 Core 21 or Saturn 21 motor.
- 11) All lipo batteries are subject to a voltage test max of 4.2 volts, prior to any race at committees wishes. anyone who fails the test will be not permitted to race that heat, and anybody who refuses to partake in a voltage test may also be removed from the heat/final.
- 16) Single bolt rear axle only, gearing is open both 32dp and 48dp are allowed z drive hubs are allowed.
- 17) Tyre additives are NOT allowed.
- 18) Parts from other manufacturers may be used as long as they serve the same purpose as the part they are replacing.
- 19) Minimum ride height of 3mm.
- 20) All added weight must be bolted to the chassis with a nut and bolt except under lipo weights.
- 21) *Scratch built cars can be used as long as they are deemed legal after regular scrutineering*

F1 Construction Rules

- 1 Models to be a reasonable representation of a full-size open wheel Brisca F1 only.
- 2 No car shall be constructed to be dangerous to persons or cause damage to competitor's cars or to the track surface. No sharp or protruding objects are allowed on the cars.
- 3 Overall chassis length to be between 285mm and 310mm. Overall chassis width to be a maximum of 160mm.
- 4 Front and rear bumpers must be fitted and have a contact surface between 9mm and 16mm. The distance between the bumper centreline and the ground must be between 32mm and 41mm. All bumpers must be plugged and have no sharp edges and must be constructed from a non-metallic material.
- 5 Over riders must be bolted to front and rear bumpers. The height from the top of the bumper to the top of the overrides must be between 19mm and 32mm at the front and must have a maximum of 19mm at the rear.
- 6 Nerf bars must be fitted on the same level as the bumpers and attached to the chassis rails with a maximum contact surface of 12mm.
- 7 Body and chassis must be securely joined at the start of race and must remain on car during the race. When initially entered at a meeting the body shell must be neatly finished and complete.
*Bodyshell must be neatly finished and complete at the start of the meeting, bodyshell must be secured to the car with a minimum of 2 fixings and the bodyshell must remain in its correct position for the duration of all races. Any car losing a fixing that causes the bodyshell to become detached must be removed from the track and be re-secured. Failure to do so incurs a zero score from that round/DQ for consolation/final.
- 8 Bodies and aerofoils must be made from ABS or polycarbonate, metal bodies or aerofoils are not allowed. All windows must be cut out on both Lexan and ABS Shells. The height of the body roof from the floor to be between 88mm and 126mm. Aerofoils if fitted must have no sharp edges and be mounted in a safe manner. The maximum size of the centre panel to be no more than 126mm-126mm, and the side panels 126mm-70mm. if an aerofoil is fitted, this alone may be painted with the driver's classification colour, if an aerofoil is not fitted then the roof of the shell must be painted in the drivers classification colour. Failure to do so will incur a 25 lap penalty on your total QF Score.
- 9 Driver's national race number must be displayed on the exterior of the car, with a minimum height of 10mm. Any colour may be used but it must be legible. Only one racing number allowed per membership. The drivers name must be on the outside of the body.
- 10 The cost of the complete car in kit form excluding all electrics must not exceed £200.00. In the case of scratch-built cars the entrant must be prepared to produce exact replicas of the car in kit form if so required for a price of £200.00 or less. Including wheels, tyres, wing and shell.
- 11 Aerial tubes to be a maximum height of 200mm from track surface. Steel whip aerials and rollover masts are not allowed.
- 12 Tyres must be foam or rubber, you can change them from kit supplied and use sleeves, Tyre additives are not allowed.
- 13 Tyres must have a minimum 12mm and maximum 26mm width, and maximum 60mm diameter.
- 14 Rear tyres to be used by the F1 section must be Contact tyres only, 32sh, 35sh, 37sh, and 40sh all with coloured bands in them
- 15 Ball races are allowed on the front and rear axle. Limited slip devices and differentials of any kind are not allowed, solid rear axle only. Single nut fixing at either end of the axle are allowed only. No carbon axles allowed, Steel rear axle only to be used.
- 16 All cars must have a maximum baseplate thickness of up to 3.2mm, with motor blocks bolted directly to the baseplate. Maximum 2 cut slots to provide flex / suspension. Minimum 1x and Maximum 2x telescopic shocks must be fitted with a minimum of 1 mounted to the top deck. No guide pins permitted. The only damping permitted is to be via the shocks. No spacers allowed between the motor blocks and base plate.
- 17- The only devices that may be connected to the in-car radio receiver are- Steering servo, E.S.C., Transponder, Roof Lights, Power Cap. Receiver battery packs are allowed.
- 18- The use of multiple speed transmissions (gearboxes) is not allowed, any 32dp pitch gears and holders are allowed. Pinion gears: size (number of teeth) is free. Single Idler gears of any size are permitted as a means of reversing motor rotation, these are to be mounted between the motor pinion and the spur gear
- 19- There is a minimum ground clearance of 3mm, this includes any protruding screws, 1mm clearance for spur gear.
- 20- Servo savers, track rods and track rod ends can all be up-rated from kit supplied.
- 21- All cars must have reverse fitted and working at the start of the race.
- 22- Cars are to be powered by either a brushed or a brushless system as defined below
Brushed System
Kamtec K21, Saturn 20 or Core 21 brushed motors. These must remain unopened, and unmodified. Motor cleaning fluids / additives are allowed. Cars will be powered by 1s Lipo or 4 to 6 cell 6 sub C sized batteries with 1.2v nominal voltage, conforming to the current Electric Board battery list. Brushed Speed controllers are without restriction providing that they include an operating reverse function and are commercially available with a recommended retail price not exceeding £65
Brushless system
Motors - Core RC Star 10.5t Fixed timing motor (CR856), Core RC Star 13.5t Fixed timing motor (CR857), Speed Passion v3 10.5t or 13.5t motor only with standard 10-degree sensor plate. All motor parts must be factory standard as originally issued.
Brushless speed controllers - the Pace 45R, Pace 60R or Pace 95R speed control must be used. ESC must run in Blinky Mode i.e., the "ROAR blinking LEDs mode."
- 23 Lipos - All Lipos used in any competitions MUST be hard-cased. Soft cases or no cases are not allowed. Cars to be powered by a 1S LiPo conforming to the current BRCA Electric Board homologation 1S stick LiPo list and safety considerations.
- 24
- 25
- 23- For drivers wishing to develop or modify cars, this should be done and tested at club level. The next stage maybe to test at National level, with the consent of the committee. Any testing at Nationals, will lead to the driver going to the last position after qualifying ie if there are 20 drivers competing, after qualifying the testing driver will be deemed to be 20th. No testing driver will pick up any points for the series or receive any trophies.
- 24- If you intend to alter your car in any way that is not covered by the rules, you must check with the class scrutineer, for approval. We expect all drivers to use common sense when modifying cars and to enter into the spirit of the sport.
- 25- Front suspension can be used with no damping allowed
- 26- **The Section reserves the right to retain a speed controller and motor after the conclusion of a meeting to measure its performance against the above criteria in a controlled environment. The equipment, or identical new replacements, will be returned to the competitor within 5 working days. Sanctions may be taken against a competitor and/or manufacturer if a controller is found to be non-compliant.**

General Rules

- 1 1- The F1 class rep will be elected at the 12th Oval AGM and hold the position for 2 years. The F1 class rep will have a seat on the 12th Oval committee. The F1 class rep will be responsible for forming a committee to run the F1 class and must include, chief scrutineer, race number/national points/grading points compiler, drivers representative. Any other position as required. A quorum of 3 people is required to make decisions.
- 2 2- Any competitor found to be in contravention of the rules and procedures will be disqualified from that meeting, be it at club or nationals events etc and will serve a suspension period deemed appropriate by the committee.
- 3 3- A Junior must be under the age of 16 at the start of the season and shall remain a junior for the entire season. The start of the season is 1st January.
- 4 4- The 1/12th Stock car National Season to run from January- December.
- 5 5- All national meetings and BRCA title meetings to be run to BRCA rules without exception.

General National & Open Race Meeting Rules

- 1 1-All national meetings will be arranged by the committee and host venues
1a-All entries will be done through the BRCA website which includes paying the relevant fee at the time of booking through the BRCA Checkout.
1b-Any driver racing at a BRCA National event must hold a valid BRCA Membership (or equivalent if an overseas driver) and be able to show proof of membership if asked to do so.
1c-Host Venues must provide details of the event for publication at least 4 weeks before the event. This must include- Venue Address including postcode, Date, Time Venue opens and time of first race.
1d-Closing date for entries will be 1 week before the event.
- 2 2-Entries to be compiled via the club promoter or nominated club representative.
- 3 3-Lap scoring at all national meetings to be carried out by an approved automated lap counting program, on a reliable computer system approved by the committee.
- 4 4-A suitable audible signal will start each race.
- 5 5-The following officials must be present at each sanctioned event: Race Director, who must be present throughout the meeting. Chief Scrutineer, who will ensure that all cars meet the requirements of the rules. BRCA Steward, who has absolute authority at race meetings and is responsible for interpretations of the rules.
6-Health and Safety. These rules are mandatory and the meeting may not proceed until the BRCA steward is satisfied that these have been observed:
- 6 6a-A first aid kit is to be made available for self-administration. This is to be held in an easily accessible area (at club official's discretion).
6b-Fire extinguishers should be available at all venues.
6c-Junior members aged 10 or 11 years of age will only be permitted to marshal if :
They wish to do so.
They use a marshalling stick.
They do not walk on the racing area whilst the race is in progress.
6d-If drivers are to stand on a raised rostrum, stage or platform then it must conform with all current Health and Safety Executive rules and regulations.
- 7 7-All open and national meetings shall be run on carpet. Minimum track width is 1 metre. Start lines must be clearly visible.
- 8 8-National venues to have minimum six power points available for competitor's use.
- 9 9-Lap scores may only be questioned by the driver involved. A parent or guardian can represent a junior member.
- 10 10-Drivers to marshal races as instructed, failure to comply will result in a 25 lap penalty from their total qualifying score.
- 11 11-Code of conduct Any misconduct by a driver or their pit crew may be penalized at any committee member's discretion. Drivers or pit crew who fail to observe the code of conduct will be disqualified from the meeting.
- 12 12-Drivers shall be responsible for the collection and fitting of the correct transponder in their car.
- 13 13-All competitors will drive from the designated position. Failure to comply will result in the loss of that race's score.
- 14 14-Any car losing a wheel or tyre during a race must be removed from the track and have it replaced. Failure to comply will result in immediate disqualification from that race.
- 15 15-Any repairs to vehicles must be affected off the track.
- 16 16-Once a race has started, the changing of cells is strictly forbidden.
- 17 17-Transmitters must be switched off whilst not racing. External battery packs for radio transmitters are not allowed. Voltage supply to the transmitter may not exceed the manufacturer's recommendations.
- 18 18-Protests must be in writing and must include a £10.00 fee. This fee is refunded if the protest is upheld. If a standard motor is protested and found to be legal then the value of the motor is reimbursed to its owner.
- 19 19-Only legal transmitter frequencies may be used and all equipment must conform to the current regulations.
- 20 20-There shall be a minimum of 10 minutes practice for each class being raced at the meeting. Practice shall be allocated either by Peg Board or by structured practice heats. The minimum time allowed between heats will be 3 minutes.
- 21 21-Trophies to be given out as soon as possible to allow people who have travelled a long way to start their journeys earlier.
22-Trophies will be awarded to 1st, 2nd & 3rd in the A final. At all meetings. There will also be trophies for the top 3 Juniors at every National, Open, Euros and worlds meeting. Race promoters may award trophies for concourse and any other awards as they see fit. Trophies must be of a reasonable quality.
- 22 23-At all national meetings the cars will be scrutineered by the BRCA official scrutineer or deputy or official club scrutineer before each heat and before & after finals. A scrutineering box and gauge to be made available for all BRCA meetings.
- 23 24-If a motor is changed, the scrutineer must approve it. Failure to get the motor approved will result in loss of any results whilst using the new motor.
- 24 25-Any body-shells entered in the concourse event must be run for the duration of the event
- 25 26-At the end of the meeting, all score sheets to be given to the BRCA points compiler who will check all results and be responsible for the distribution of the points tables.
- 26 27-National dates are to be finalised by 1st March.
- 27 28

Grading, Roof Colours and Numbers

- 1 1-Roof Colours and Emblems/Stripes (Junior and Senior), World Champions = Gold, National Points Champions = Silver, European Champions = Red/Yellow Cheqs. British Champions = Black/White Cheqs.
Ladies National Points Champion = Grade colour/Silver Cheqs. Whites and Yellows Champion = White/Yellow Cheq stripe (15mm max width), English Open Champion = Flag of St George, Scottish Open Champion = Flag of St Andrew, Welsh Open Champion = Flag of St David. Club Champion = Gold/Silver Cheq stripe (15mm max width).
Any other regional/local championship can be represented with a coloured stripe (max 10mm width) or emblem if approved by the committee.
- 2 Superstar = Red with 2 gold stars or flashing lights. Red, Blue, Yellow, White.
- 3 2-Grading Rules, The Junior and Senior World champions, National Points champions, European champions, and British champions will have a grade of superstar whilst they hold the title. All other drivers entering a national event will have a national grading as assigned by the grading officer. National gradings will only apply at national events and in no way affect club grades. Drivers who are not on the grading list when entering their first national event that season will be graded on their official club grade but no higher than red, if they are ungraded at club level then the grading officer will select the starting grade after consulting the driver and the club they race at. Any driver that loses a championship will remain at superstar until the next regrading. Regrading will take place every 2 rounds and drivers will start from their new grade (if changed) at the next event. A driver graded red, blue, yellow, or white will not be regraded from their season starting grade until they have raced in at least 1 grading qualifying event that season. Any superstar that has not entered 50% of gradable events at a regrade period will be moved to red. Any drivers with tied grading scores at the regrade will be graded the same colour, the grading colour assigned will be decided by the grading officer. The grading officer will have final say on grading positions but should aim for 10% superstar, 20% red, 25% blue, 25% yellow, 20% white. After the last meeting of the season any driver that has not entered a national event that season will be removed from the grading list, then a regrade of all the remaining drivers will take place and this will be the drivers starting grade for the following season. A driver grading score will be determined by their national points total divided by meetings attended. The grading officer will have discretion to remove or regrade a driver at any time if deemed appropriate and approved by the committee.

- 4 3-There will be one Race Number list for 1/12th F1 Stock cars. Drivers racing in the previous years' series shall automatically retain their number for the following season, if they wish to change their number there will be a 2 week period at the end of the season for number transfers. Drivers who did not race in the previous year's series will be able to request numbers of a first come first serve basis, this will be open 4 weeks before the 1st season meeting and be available until registration closes on the last meeting of the season. Individual drivers must request numbers (unless a Junior where a parent/guardian can request) there will be no block requesting of numbers through clubs.

4-The world champion has the option to display the number 1 on their car for however long they hold the championship title.

- 1
2 Stockcar Racing Rules
3 1-Heats and finals to be of 5 minute duration, except in the case of a large entry when races may be reduced to 4 minutes duration. Heats must be shuffled each round and a reasonable cross-section of roof grades must be present in each heat.
5 **2-The start/finish line and starting points for white, yellow, blue, red and superstar grades must be clearly marked on the track or track edges with all drivers starting from the correct position according to grade.**
3-Stockcars will race anticlockwise on an oval track.
4-No alterations to any drivers car after it has been scrutineered and passed to enter their race. If a driver is found to make any adjustments after there car has been scrutineered they would lose 25 laps off there qualifying score and 10 points.

National Round Meeting Rules

1-All national round dates will be confirmed by the committee before the season starts

- 1 2-Entry Fees will be set by the committee at the beginning of the season
2 3-National/Junior National Series Format, A maximum of 8 rounds with a driver's lowest 2 scores dropped (non-attendance will be classed as a lowest score)
3 4-National meeting format, 4 rounds of heats with best 3 to count. A Tie will be decided by the highest score of a single round followed by the next highest, etc, etc. If still a tie it will be decided on quickest finish time of highest lap score. Top 7 qualify to the grand final. Positions 8-16 go to the consolation final. 1st and 2nd place from the consolation will be promoted to the grand final. There will be an all in junior final at all national rounds.
4 5-The consolation, junior final and grand final will be a closed grid start in qualifying order.
5 6-A Minimum of 5 cars and maximum of 9 cars in any one race, this only applies at the organisational stage.

7-National Points scoring

- 1 Only the world championship meeting will not be eligible to score national points. All other national rounds and championships will score as follows.
2 Heats (only a drivers best 3 heat results will score national points) 1st -10pts 2nd -9pts 3rd - 8pts 4th- 7pts 5th- 6pts 6th- 5pts 7th- 4pts 8th- 3pts 9th- 2pts
3 Consi/Semi Finals- The drivers that are not promoted to the final will score points as follows based on position 10,9,8,7,6,5,4,3pts
4 Grand Final and Junior Final 1st- 30pts 2nd 28pts 3rd- 26pts 4th -25pts 5th- 24pts 6th- 23pts 7th- 22pts - 8th 21pts 9th - 20pts.
5 8-Junior National Points Scoring

Only a junior's best 3 points scored in the meeting heats and junior final will count towards the junior national points series.

- 1
2
3 Whites and Yellows Championship
4 1-The Championship will be run over 6 rounds incorporated into the National Series events with all rounds points to count. At the end of the season the racer with the highest points will be crowned the Whites and Yellows champion.
5 2-Each round will comprise of 1 or more heats dependant on number of entrants, with points awarded across the heats based on number of laps done (fastest time will be used if laps are tied). Max number of racers in each heat will be 9.
6 3-Any White or Yellow grade racer booked into the corresponding National Series event will be eligible to race.
7 4-Any racer that has raced in a round and is then regraded above yellow will have their points held but will no longer be eligible to race in an event unless they drop back down the gradings.
8 5-Points=1st 30, 2nd 28, 3rd 26, 4th 24, 5th 22, 6th 20, 7th 19, 8th 18 etc, etc.

British Open Meeting Rules

- 1-Request from clubs to host the British Championship must be submitted to the chairman/committee by 1st September. In the case of multiple requests, the committee will vote on which track will host the British Championship.
2-Entry fee at the discretion of promoter.
3-Entries to be compiled via the club promoter or nominated club representative
4-British Open meeting format, 5-minute races. 4 rounds with your best 3 rounds to count, Top Qualifier straight to the final, The next 16 cars get split into 2 Semi's, top 4 cars from each Semi are promoted to the Final.
5-All Junior entries will be entered into the British Junior Final which will be ran after the Semi's.

European Championship Meeting Rules

- 1-The 1/12th Stock car European will be run annually, Request from clubs to host the European Championship must be submitted to the chairman/committee by 1st September. In the case of multiple requests, the committee will vote on which track will host the European Championship.
2-The European Championships will be run over 1 or 2 days at promoters' discretion
3-Entry fee at the discretion of the promoter.
4-Entries to be compiled via the promoter or nominated representative.
5-Meeting format, 5-minute races. Timed practise on first day. Between 4 and 6 rounds at promoters' discretion, best 3 rounds to count. The Top 16 cars get split into 2 Semi's, top 4 cars from each Semi are promoted to the Final.
6-The loosing cars from each semi have a Last Chance Consolation Race, where the winner is promoted to the back of the grid in the final to make it a 9-car final.
7-All Junior entries will be entered into the European Championship Junior Final which will be ran after the Semi's.

World Championship Meeting Rules

- 1-The 1/12th Stock car Worlds will be run annually in the month of November, there is no other month stipulation for championships. The Worlds will be run on a Rotational System Between the clubs listed Below. If a club/promotion wishes to host at a different venue other than their own they will be allowed to do so, however it will be their responsibility to run/host the event. If a club does not want to host the event, then they can simply decline the offer of the world final that year and skip their year in the que. They will then re-join at the back as if they have ran the event and wait for their turn to come back around.

Current clubs eligible to run the 1/12th Stockcar Worlds and the current rotation

Blackpool
Rugby
Urmston

Dentona

Hathern

Scotland Promotion

Hotdog Raceway

Holland Promotion

2-If a club wishes to host a world championship event but isn't on the above list they can be added at the AGM. They will be added at the bottom of the list (Just before the previous year's world final)

3-The World Championships will be run over 1 or 2 days at promoters' discretion

4-Dates/location for the World Championships need to be in by the end of March.

5-Entry fee to at the discretion of the promoter.

6-Entries to be compiled via the promoter or nominated representative.

7-Meeting format, 5-minute races. Timed practise on first day. Between 4 and 6 rounds at promoters' discretion, best 3 rounds to count. The Top 32 cars get split into 4 quarters, The top 4 cars from each quarter are promoted to make 2, 8 car Semi's, top 4 cars from each Semi are promoted to the Final.

8-The loosing cars from each semi have a Last Chance Consolation Race, where the winner is promoted to the back of the grid in the final to make it a 9-car final.

9-All Junior entries will be entered into the World Championship Junior Final which will be ran after the Semi's

F2 CONSTRUCTION RULES

- 1) Models to be a reasonable representation of a full-size open wheel F2 Brisca stock car. F2 Stock car Body for all Championship meeting. Front wings allowed.
- 2) No car shall be constructed so as to be dangerous to persons or cause damage to competitor's cars, or to the track surface. No sharp or protruding objects are allowed on the cars.
Overall chassis length to be between 285mm and 310mm. Overall chassis width to be a maximum of 163mm. Overall Chassis thickness (contact surface) between 9mm and 16mm and be consistent thickness throughout all parts. Chassis MUST be made from one continuous piece of plastic (this MUST include the front and rear bumpers and nerf rails.), with one gap permitted for the location of the spur gear. (B) Minimal notching for steering and suspension components.
- 3) The maximum bumper height must not exceed 46mm (measured at the top of the bumper) and have a minimum height of 27mm (measured from the bottom of the bumper) ALL bumpers, Top chassis and nerf rails must be plugged and have no sharp edges.
- 4) Over riders must be fixed with a Bolt or nut to front and rear bumpers. The height from the top of the bumper to the top of the overrides must be between 19mm and 32mm at the front and must have a maximum of 19mm at the rear.
- 5) The baseplate can be constructed from alloy, glass fibre or carbon sheet, and must not have splits or cuts for suspension.
- 6) Rear suspension to be of the pod type, with a single pivot at the front and simple spring arrangement. No oil filled shock absorbers.
- 7) Independent front suspension can be used (a simple Spring arrangement) with no damping allowed. No oil filled shock absorbers. No beam axle and no alloy wishbones.
- 8) Ball raced Axles are allowed front and rear.
- 9) There is a minimum ground clearance of 3mm, this includes any protruding screws, 1mm clearance for spur gear. 11) Tyres must be foam or rubber, Tyre additives are not allowed.
- 12) Tyres must have a minimum 20mm and maximum 26mm width, and a maximum 60mm diameter.
- 13) The use of multiple speed transmissions (gearboxes) is not allowed, only 32dp pitch gears will be allowed. Limited slip devices and differentials of any kind are not allowed, solid rear axles only. Single nut fixing at either end are allowed only. No carbon axles allowed.
- 14) The cost of the rolling car (excluding all radio, batteries, Esc, and motor) must not exceed £180.00.
- 15) MOTORS. Only one drive motor per car. Only motors that meet the following specification to be used. (see scrutineer if unsure)
- 16) BATTERIES. Cells to be sub-C sized, 4 cell, 4.8v Nominal. Any capacity is allowed.
- 17) Mechanical or Electronic Speed Controllers may be used. Maximum RRP of £85.
- 18) All cars must have reverse fitted and working at the start of the race.
- 19) Body and chassis must be securely joined at the start of a race and must remain on car during the race. When initially entered at a meeting the bodysell must be neatly finished and complete.
- 20) Bodies and aerofoils must be made from ABS or polycarbonate, (LEXAN). Metal bodies or aerofoils are not allowed. Front wings allowed
- 21) ABS Bodies must have all four windows cut out, LEXAN bodies can have their windows uncut but must be left clear. The height of the body roof from the floor to be between 88mm and 126mm. Aerofoils if fitted must have no sharp edges and be mounted in a safe manner. The maximum size of the centre panel to be no more than 126mm-126mm, and the side panels 126mm-70mm.
- 22) The roof must be painted down to the waistline of the body with the driver's grading colour if an aerofoil is not fitted. If an aerofoil (roof fin) is fitted, this alone may be painted with the driver's grading colour.
- 23) Driver's national race number must be displayed on the exterior of the car. The drivers name must also be on the outside of the body.
- 24) Steel whip aerials and rollover masts are not allowed.
- 25) If you intend to alter your car in any way that is not covered by the rules, you must check with the class scrutineer for approval. We expect all drivers to use common sense when modifying cars and to enter into the spirit of the sport.
- 26) Racing is in an anti-clockwise direction only.
- 27) Contact is allowed, though no follow ins, striking stranded cars or roof shots. Anyone seen to be deliberately doing any of the above will be asked to remove their car from the track.
- 28) Wheels only dog drive wheels with notches (standard) to be used, with a maximum width of 26mm only . No LMP or GT12 style bolt wheels allowed. Only single bolt wheel and axle fittings allowed.
- 29) There must be a minimum distance of 23mm between the baseplate and the Top chassis, this distance must be maintained between the wheelbase of the car.
- 30) Race ready cars to race on track must have a minimum weight of 1200g, this will be measured before every race.
- 31) F2 stockcar wing, when a wing is fitted it should be central to the car, Not offset to one side of the car, with a visible gap between roof and wing.

F2 PROCEDURAL RULES 2023 GENERAL RULES AND REGULATIONS

These General Rules cover all F2 Meetings. They should also be read in conjunction with specific construction rules.

GENERAL RULES

- 1) The Chairman and Secretary positions elected at the section's AGM shall be held for two years. These positions should be elected on alternate years.
- 2) Any competitor found to be in contravention of the rules and procedures will be disqualified from that meeting, be it at club or national events etc. and will serve a suspension period deemed appropriate by the committee.
- 3) A Junior must be under the age of 16 at the start of the season and shall remain a junior for the entire season. The start of the season is defined by the date of the first 12th Stock car National.
- 4) Racing is in an anti-clockwise direction only.
- 5) Contact is allowed, though no follow ins, striking stranded cars or roof shots. Anyone seen to be deliberately doing any of the above will be asked to remove their car from the track.

GENERAL NATIONAL & OPEN RACE MEETING RULES

- 1) The BRCA online event booking in system (via the BRCA website) must be used for all National and Championship events.
- 2) Lap scoring at all national championship meetings to use an automated system with amb/mylaps/ mrt transponders, on a reliable computer system approved by the committee.
- 3) A suitable audible signal will start each race.
- 4) The following officials must be present at each sanctioned event: Race Director, who must be present throughout the meeting. Chief Scrutineer, who will ensure that all cars meet the requirements of the rules. BRCA Steward, who has absolute authority at race meetings and is responsible for interpretations of the rules.
- 5) Health and Safety. These rules are mandatory and the meeting may not proceed until the BRCA steward is satisfied that these have been observed: a) A first aid kit is to be made available for self administration. This is to be held in an easily accessible area (at club official's discretion). b) Fire extinguishers should be available at all venues. c) Marshalling sticks must be provided. d) If drivers are to stand on a rostrum over 2 foot in height e.g. stage or platform then a suitable fixed front barrier is required and must meet the satisfaction of the safety officer or BRCA steward in attendance.
- 6) All open and national meetings shall be run on carpet. Minimum track width is 1 metre. Start lines must be clearly visible.
- 7) National venues to have minimum six power points available for competitor's use.
- 8) Lap scores may only be questioned by the driver involved. A parent or guardian can represent a junior member.
- 9) Drivers to marshal races as instructed, failure to comply will result in a 25 lap penalty from their total qualifying score. Junior drivers do not have to marshal so long as a substitute marshal can replace them. Once cars have raced , they need to be placed into a park ferme (as designated by race control) until marshalling duties are finished.
- 10) Code of conduct Any misconduct by a driver or their pit crew may be penalized at any committee member's discretion. Drivers or pit crew who fail to observe the code of conduct will be disqualified from the meeting.
- 11) Drivers shall be responsible for the collection and fitting of the correct transponder in their car.
- 12) All competitors will drive from the designated position. Failure to comply will result in the loss of that race's score.
- 13) Any car losing a wheel, tyre, body or have substantial spur gear damage during a race must be removed from the track and have it replaced. Failure to comply will result in immediate disqualification from that race.
- 14) Any repairs to vehicles must be affected off the track.
- 15) Once a race has started, the changing of cells is strictly forbidden.
- 16) Transmitters must be switched off whilst not racing. External battery packs for radio transmitters are not allowed. Voltage supply to the transmitter may not exceed the manufacturer's recommendations.
- 17) Protests must be in writing and must include a £10.00 fee. This fee is refunded if the protest is upheld. If a standard motor is protested and found to be legal then the value of the motor is reimbursed to its owner.
- 18) Only legal transmitter frequencies may be used and all equipment must conform to the current regulations.
- 19) Trophies to be given out as soon as possible to allow people who have travelled a long way to start their journeys earlier.

- 20) At all national meetings the cars will be scrutineered by the BRCA official scrutineer or deputy or official club scrutineer before each heat and before & after finals. A scrutineering box and gauge to be made available for all BRCA meetings. Once cars are scrutineered they must stop on the scrutineers table (park-ferme) until 30 seconds before the race starts. Cars are to be scrutineered before the time set by the race director for the first heat and future heats are to be scrutineered before the previous heat is finished.
- 21) If a motor is changed, the scrutineer must approve it. Failure to get the motor approved will result in loss of any results whilst using the new motor.
- 22) At the end of the meeting, all score sheets to be given to the BRCA points compiler who will check all results and be responsible for the distribution of the points tables.
- 23) In the event of an issue with lap counting (for more than one car) the race affected will be run again.

F2 STOCKCAR RACING RULES

- 1) Meeting format, 5 minutes races, 4 rounds with your best 3 rounds to count, commencing with white grades on the back straight, opposite the start/finish line, then yellow a quarter lap down, blue grades a further quarter behind and so on. Top 2 go straight to the final, the next 16 cars go through to the two consolation races, the top 3 from each consolation race are promoted to make an 8 car final. Finals and consolations will start in qualifying order and will be of a 6 minute duration Awarding of points from the event. 1st 100, 2nd 99 etc.... down to 8th place in the final. Then 9th place will be the person who finished 3rd in there semi (with the highest laps) 92, then 3rd in the other semi 91, then 4th in there semi (with the highest laps) 90, then 4th in there other semi 89 etc.... down to the lowest lap score in the semi, then 80 for the first none semi qualifier... down to the last racer, One extra point for top qualifier.
- 2) A Minimum five, maximum nine cars in any one race This applies at qualifying stage only. A tie at any meeting will be decided by the highest lap score of any round followed by the next highest etc., then if still a tie, it will be decided on split times of the highest lap.
- 3) Stock cars will race anticlockwise on an oval track.
- 4) Points for the meeting will be awarded as follows: - 100 points for winner of final, dropping by one point for each driver down to last place, with one extra point for top Qualifier.
- 5) Worse round score to be dropped when qualifying for the World Final with the Top 32 drivers from qualifying going into 4 quarter finals, top four from each quarter go through, leaving 16 finalists going into 2 semi-finals, top four from each semi-final leaving an 8 car final. The current World Champion must qualify the same as everyone else.
- 6) Closed grids in all nationals, semis, grand national's consolation and world series Not staggering like gt12s Grand National championship has 12 qualifiers.
- 7) Overseas race- top 4 from race get a place in each of the 4 quarters for world final.
- 8) Minimum of 3 rounds of qualifying to be done before a place can be gained in the world finals.
- 9) Any part of the car may be substituted at a meeting except the bottom chassis without having it stamped by scrutineer. Old one to be left in scrutineering until the end of the meeting.
- 10) If a car is found to be illegal after the final, the car/driver is automatically disqualified.
- 11) Heats to be made up of a fair mix of grades.
- 12) National rounds to have a minimum of 4 weeks gap between
- 13) National final to be held on a solus date the does not clash with any other BRCA national final or Brisca big event.

FEATURE		REQUIREMENT
(Dimensions in mm.)		
1	Can Length from mounting face	53.00 max.
2	Can Diameter	36.02 max.
3	Manufacturers Logo/Motor type	Plain silver Can with:- Manufacturers label including Motor type and Part #, or plain silver Can engraved with manufacturers name, motor type and Part #.
4	Bushings	No bearings/aces allowed, only Bushings
5	Timing - Brush to Can zero, mechanical	Fixed timing. Brush spring plates to have mounting pin centre between magnets.
6	Magnet Position to Can zero	+/- 3 deg.
7	Stack Length with Hysol removed	21.00/22.80. Measured across metal faces of end laminates
8	Stack Laminale thickness	0.50 +/- .05
9	Number of Turns	21 Turn minimum on each pole
10	Wire diameter without lacquer coating	0.710 mm maximum
11	Balancing	Armature balancing allowed
12	Fan	Armature fan allowed

Paul Worsley. 16.07.19