

<u>Haywards Oval Track Racers</u> 2024 Handbook

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CONSTITUTION

1. TITLE.

The club shall be known as Haywards Oval Track Racers.

2. OBJECTS

a. To promote the friendly competition of radio-controlled cars.

b. To facilitate the exchange of information and ideas relating to the sport.

3. MEMBERSHIP.

Membership shall be open to all and shall be deemed to commence when the Club issues the appropriate membership documentation. Membership shall be within the following categories: -

(a) Full Individual Members (juniors and seniors).

4. SUBSCRIPTIONS.

The subscriptions period shall be one year running from the 1st of January to the 31st of December of the same year. Membership subscriptions shall be reviewed and fixed annually at the A.G.M. Any member who has not paid his/her subscription by the end of December shall be assumed to have terminated his/her membership.

5. RESIGNATION.

Any member wishing to withdraw from club membership must notify the secretary in writing.

6. CESSATION OF MEMBERSHIP.

Any member failing to renew his/her membership as required or any member notifying his/her resignation or being expelled shall forfeit all right to claim on the club its property.

7. OFFICIALS.

To qualify for election to any committee position, the member so elected must first be a full individual and active member of the club for at least 2 years. The term "active" will be at the discretion of the committee. The following officers shall be elected annually for a period of one year at the A.G.M. The nominee for these positions to be sent to the secretary in writing one week before the A.G.M. The nominee must be a full member of the club: - The position being Chairman, Secretary & Treasurer plus such other officers as may be deemed necessary. A quorum shall consist of 60% of club officers and 30% of members at an A.G.M.

8. POWER OF THE COMMITTEE.

The committee shall manage all concerns of the club upholding the club's constitution, and shall have powers to settle all points of interpretation of club rules, providing such powers shall not overrule a resolution of an A.G.M. The committee shall manage all the concurs of the racing interest for which it was established, with powers to settle all point of interpretation of rules, provided such power shall not overrule a resolution of a A.G.M. The committee shall have powers to establish sub-committees to manage special interests or events and co-opt members onto such sub-committees. The committee may, from time to time, fill vacancies in its number which may arise for the remaining period of office. In case the conduct of any member, in or out of club event, shall in the opinion of the committee be detrimental to the character or interest of the club, the committee shall request such member to attend before them to justify his/her conduct. The committee after hearing such member, or in the event of such member neglecting to attend before them, shall have the power to expel such member or call upon them to resign and shall there upon cease to be a member of the club. In every case of expulsion or required resignation of a member the decision shall be final and be for at least three years unless the committee decides otherwise. A minimum of two thirds majority of all members of the committee shall be necessary to order an expulsion.

9. VOTING.

Proposals for change of the club constitution or constitution rules shall require at least a 2/3 majority vote at an AGM with abstentions removed. All elections of officers shall be decided by a straight vote of Majority of those present at an AGM with abstentions removed. In both cases a Quorum is required, see <u>7. Officials</u> for details of a Quorum.

10. FINANCE.

All matters relating to the spending of Club funds shall be referred through the Treasurer to the Committee. The Treasurer shall make an annual financial statement to the A.G.M. offering all relevant documents for inspection at the meeting.

11. FINANCIAL YEAR.

1st November to 31st October.

12. ANNUAL YEAR.

The A.G.M. shall be held between 1st November and 31st December, on the most sensible date to prevent clashes with other events. The AGM evening will include the yearly prize giving. The following business shall be transacted at the A.G.M: -

1. Apologies of absence.

2. Chairman's welcome and address.

3a. Matters arising from last A.G.M.

3b. A.G.M minutes proposed and seconded.

4. Presentation of the club's accounts.

5. Review and agree the annual membership fee.

6. Review and agree the race fees.

7. Election of all officers. The current committee will stay in office until the end of the AGM at which point the newly elected committee will take over the running of the club.

8. Discussion of proposals for constitutional and rule changes.

9. Discussion of any other business.

10. Arrange provisional dates for the next AGM and next year's race calendar.

13. EXTRAORDINARY GENERAL MEETING.

An E.G.M. may be called at any time if the Committee so decide. The Secretary shall also call a meeting on receiving written request to that effect, signed by no less than 20% of the membership. Such a general meeting shall take place within 28 days of the written request being received and all members shall receive 14 days' notice of the meeting, but without the necessity for detailing any further particulars. A resolution of an E.G.M. shall not be valid unless 30% of the membership is present and not unless the resolution be passed by at least two thirds of the membership is present and not unless the resolution be passed by at least two thirds of the members voting.

14. MINUTES OF MEETINGS.

Minutes of an A.G.M., E.G.M. or annual conference shall be published as soon as convenient thereafter and in any case before the next similar meeting. Minutes of Committee meetings shall be available to all committee members before the next similar meeting. Copies of all minutes shall be kept for five years by the appropriate officer.

15. DEFICIENCY OF FUNDS.

In the event of insolvency, the deficit shall be made good by an equal payment from each member or in such manner as an A.G.M or E.G.M shall decide.

16. MEMBER'S ADDRESSES.

Each member's records shall be stored on a computer and shall be deemed to be correct unless the Membership Secretary be notified in writing of an alteration of change of said member.

17. CONSTITUTION RULES.

A copy of the constitution shall be forwarded to each member on joining and thereafter annually in a Club handbook. These rules so presented shall be binding on every member. No member shall be absolved from the effect of these rules on allegation of not having received them.

18. INTERPRETATION OF RULES.

The Committee shall be the sole authority for the interpretation of these rules and the decision of the Committee upon any question of interpretation, or upon any other matter affecting the Club not provided for by these rules, shall be final and bind on members.

19. ALTERATION OF CONSTITUTION.

The Constitution defines the rules for the government of the Club. All alterations or additions in the Constitution may only be adopted by resolution at an A.G.M. or E.G.M. convened according to the Constitution. Such resolution must receive a two thirds majority voting.

20. DISSOLUTION OF CLUB.

If at any general meeting a resolution for the dissolution of the Club be passed by a two thirds majority of the membership present, and such resolution be confirmed at an E.G.M, held not less than one month thereafter at which not less than half the members are present, by a majority of two-thirds of the members of the Committee shall thereupon or at such date shall be specified in the resolution, proceed to dissolve the Club. The Committee shall proceed to realise the property of the Club, and after discharge of all liabilities, shall divide the same amongst all the members according to the proportions decided at the E.G.M. Upon the completion of such division, the Club shall be dissolved.

21. OBLIGATION OF MEMBERS.

To uphold the Constitution of the Club. To behave in a responsible and orderly fashion.

22. Anyone who makes their living of part thereof from RC 12th oval cannot hold any office of authority or join the committee.

23. Families can be granted proxy voting at the AGM for Junior members of the family that can't make the AGM. This will only be for parents/guardians who may vote on behalf of their children who are members of the club.

GENERAL RACE & PROCEDURE RULES

1. Heats and finals

(a) Heats and Finals to be 5 Minutes in length. F2 Stockcars Finals to be 6 Minutes in length. These may be changed in the event of a time constraint.

(b) Other race formats may occur on "special" or "fun" meetings

2. Cars to race on a stock car oval

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

4. Heat format: Fixed heats sorted randomly.

5. Maximum number of cars in all heats and finals will be 6 cars for all classes with the exception of 1300 Stockcars and Superstox which will have a maximum of 8 cars for heats and finals.

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

7. Qualifying format: Heats will be mixed round by round and will qualify via the FTQ method.

8. Championship points. Points to be scored in finals from 100 descending. 100 99 98 97 etc.

9. 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.

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

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

12. Scrutineering will be carried out at the club's discretion

(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 notarised committee meeting.

- 13. Any motor changed at a meeting to be approved by the scrutineer.
- 14. 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 MHz or 40 MHz is used.

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

- 15. External battery packs for radio transmitters are not allowed.
- 16. Open practise and frequency management will be at the club's discretion

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

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

19. Any bodyshell entered in 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.

20. 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.

21. 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.

22. Any repairs to vehicles MUST be affected OFF the track.

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

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

25. There are 6 staple roof grades at the club, white, yellow, blue, red, superstar and club champion; in ascending order. A driver will always wield one of these colour grades unless they win a championship grade at a national level championship event.

26. The driver's roof grade MUST be a minimum of 90mm x 90mm in size. Where the roof of the bodyshell is smaller than 90mm x 90mm, the roof grade must cover the entire roof. There should be no other colour intrusion within the area of the roof grade. The only exception to the intrusion of roof grade would be; Club champions and any other independent achievements/championships, these may be sign written in writing within the bounds of the roof grade

27. Roof Grading. There are three grading periods in a season. Roof grades will only be "re-calculated" at these points. All drivers completing 3 or more club championship race meetings will be put into points average order. Championship graded drivers are not included in this. Drivers doing less than 3 club championship race meetings will retain their current grade at the grading period. A white roof diver must move up to yellow after they have raced through two grading periods. If a white roof driver takes well to the hobby, at the discretion of the committee, the driver can be promoted to a yellow at their first grading period. A driver will be fast tracked out of the white grade immediately at the discretion of the committee.

Club champ (superstar with silver stars) – Annual points championship winner

Superstar - top two drivers in a formula at each grading period

Red – top 1/3 of drivers on points average

Blue – middle 1/3 of drivers on points average

Yellow – lower 1/3 of drivers on points average

white – Novice only/new to rc cars.

	Roof Grade Key	
	World Champion	
National Champion		
silver stars	Club Champion	silver stars
	Superstar	
	Red	
Blue		
Yellow		
	White	

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

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

29. Marshalling:

a. Divers to marshal the following heat to which they have raced. The final heat of qualifying to marshal the first.

b. Any driver not fulfilling marshalling obligations will be penalised by loss of Qualifying time/FTQ/Final Result.

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

d. Marshals must remain at their marshalling point 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.

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

31. Code of Conduct: - Any Committee member can bring to a competitor's attention, misconduct by themselves or members of their pit crew, and may penalise the offending driver at the discretion of the committee.

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

33. All drivers should be standing in the club's designated rostrum area. This area is only for drivers whilst a race is active.

34. Drivers to allow room at the central position of the rostrum area for wheelchairs and/or walking aided members.

35. Starting qualifying heats late is permitted. Starting finals late is NOT permitted. If a driver misses the start of a final, they may not partake in that race. Anyone missing a final will be classified as DNS and will score 0 points from that race.

36. To score points a car must record a minimum of 1 lap on the timing system in their Final. Certain circumstances may force the race director to request a driver to not take part in their final. This will usually be due to format or time constraints. In this case the driver will score points for their qualifying position.

CONSTRUCTION RULES FOR ALL CLASSES

- 1. No car should be constructed or repaired that are considered dangerous to persons, causing damage to competitor's cars or to the track surface. (sharp/rough edges and protruding objects)
- 2. 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.
- 3. Steel whip aerials and rollover masts are not allowed.
- 4. Tyres must be foam; Tyre additives are not allowed.
- 5. The use of multiple speed transmissions (gearboxes) Are not allowed
- 6. For drivers wishing to develop or modify cars, this will be carried out at club discretion
- 7. 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 must be fully sunk into the chassis. Washers and nuts are not permitted on the underside of the chassis.
- 8. Limited slip devices and differentials of any kind are not allowed, solid rear axle only.
- 9. All cars must have reverse fitted and working at the start of every race.
- 10. Cars are to be powered by either a brushed motor with batteries of nominal voltage 4.8/6.0/7.2v according to class or a brushless motor and batteries of nominal voltage 3.7v or 3.8v which are defined below.

Definition of a Brushed motor

Motors allowed – The club will follow the BRCA F2 brushed motor spec and list. Currently this allows the HPI Saturn 20, Kamtec K21 and the Schumacher Core21. These must remain unopened, and unmodified - External motor bearings are NOT allowed.

Motor cleaning fluids / additives are allowed.

Definition of Brushless Motor

21.5, 13.5 and 10.5 brushless motors in 540 size.

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 any 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. Brushless speed controllers with a Maximum UK Recommended Retail Price of £150.

Batteries and Motor Combinations Allowed

Brushless System:

All Lipo's used in any competitions MUST be hard - cased. Soft cases or no cases are not allowed. Cars with Brushless Motors will be powered by a 1s Lipo with a maximum nominal voltage of 3.7v or 3.8v with a max charge voltage of 4.20V and a max charge rate of 10A

National Hotrods = 13.5t brushless motor (brushless only class) 2Litre Saloonstox = 10.5t or 13.5t brushless motor Brushless 1300 Stockcars = 21.5t brushless motor from BRCA EB list

Brushed System:

Cars with Brushed motors will be powered by sub-C sized NiCd or NiMh batteries with 1.2v nominal voltage per cell.

2Litre Saloons = 4cell 4.8v Nominal/5cell 6.0v Nominal/ 6cell 7.2v Nominal. 1300 Stockcars = 4 cell, 4.8v Nominal.

BRCA 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) all cars must be commercially available to buy, any one wishing to manufacture a car must go through the process of test and development at their regular club with the clubs agreement, if they wish to then race the car they must be able to make units available to purchase by other racers, it must comply to the current construction regulations if being sold to race, it must be of a comparable price to those being sold by other manufacturers and not overly priced to limit availability. Anyone wishing to develop or modify a car that does not comply with current construction regulations has to do that test and development at their local club with their agreement, any changes to the construction rules that allow new designs to race would need to be approved at the brca agm following the correct procedure

BRCA 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 and 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) all cars must be commercially available to buy, any one wishing to manufacture a car must go through the process of test and development at their regular club with the clubs agreement, if they wish to then race the car they must be able to make units available to purchase by other racers, it must comply to the current construction regulations if being sold to race, it must be of a comparable price to those being sold by other manufacturers and not overly priced to limit availability. Anyone wishing to develop or modify a car that does not comply with current construction regulations has to do that test and development at their local club with their agreement, any changes to the construction rules that allow new designs to race would need to be approved at the brca agm following the correct procedure

BRCA 2Litre 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 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

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 13.5t/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) all cars must be commercially available to buy, any one wishing to manufacture a car must go through the process of test and development at their regular club with the clubs agreement, if they wish to then race the car they must be able to make units available to purchase by other racers, it must comply to the current construction regulations if being sold to race, it must be of a comparable price to those being sold by other manufacturers and not overly priced to limit availability. Anyone wishing to develop or modify a car that does not comply with current construction regulations has to do that test and development at their local club with their agreement, any changes to the construction rules that allow new designs to race would need to be approved at the brca agm following the correct procedure.

BRCA Ministox 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

12) 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

13) parts from other manufacturers may be used as long as they serve the same purpose as the part they are replacing

14) minimum ride height of 3mm

15) All added weight must be bolted to the chassis with a nut and bolt except under lipo weights.

16) all cars must be commercially available to buy, any one wishing to manufacture a car must go through the process of test and development at their regular club with the clubs agreement, if they wish to then race the car they must be able to make units available to purchase by other racers, it must comply to the current construction regulations if being sold to race, it must be of a comparable price to those being sold by other manufacturers and not overly priced to limit availability. Anyone wishing to develop or modify a car that does not comply with current construction regulations has to do that test and development at their local club with their agreement, any changes to the construction rules that allow new designs to race would need to be approved at the brca agm following the correct procedure

HOT's Superstox Construction Rules 2023

- SUPERSTOX/OUTLAW F2 STOCKCARS
- 1. Models to be a reasonable representation of a full size Superstox/F2 Stockcar
- 2. Overall chassis length between 285mm and 310mm
- 3. Overall chassis width max 163mm
- 4. The max bumper height to the top 46mm front and rear
- 5. The min bumper height to bottom 27mm
- 6. Over riders must be fitted to front and rear
- 7. Bottom chassis can be constructed from GRP, Alloy, or carbon plate
- 8. No splits or cut for suspension
- 9. No oil filled shock absorbers
- 10. Rear suspension is pod type can pivot with simple spring arrangement
- 11. No beam axle or alloy wishbones
- 12. Independent front suspension simple spring arrangement
- 13. Minimum ground clearance 3mm spur gear 1mm
- 13. Ball raced axles front and rear
- 14. Tyres to be foam type only
- 15. Wheel and tyre width, min 25mm max 26mm
- 16. Drive one spur gear 32dp only
- 17. Single nut fixing on axles and no carbon axles
- 18. Motors brushed Kamtec K21, Core 21 Saturn 20
- 19. Brushed esc max RRP £85
- 20. Brushless any FIXED timing 17.5 motor
- 21. ESC SkyRc Toro TS 50 combo or any make max RRP £100
- 22. Batteries Nimh only 4cell 4.8v any capacity
- 23. Body shells ABS or Lexan front and rear wing can be fitted
- 24. Drivers must have an outlaw race number (for DOT Superbowl series only)
- 25. Any make of 1/12th Stockcar can race old or new
- 26. Minimum weight 1200grams

HOT's Brushless 1300 Stockcar option rules 2023

1) Cars to be constructed as per the BRCA 1300 stockcar construction rules with the following options. Both cars will run as one class at HOT's

2) Powered by a hard cased 1s Lipo charged to 4.20V maximum and brushless esc/motor setup.

3a) Electronic speed controller must be a CORE RC PACE 95R BRUSHLESS ESC - 1S - part number CR817. Committee have the power to adjust this rule should availability become an issue. The ESC must remain in blinky mode with the LED blinking (boost set to 0 and turbo timing set to 0). The ESC must not be modified or changed in any way. The fan must remain and be working. The original external capacitors must be used.

3b) Brushless motor must conform with the BRCA homologation list "EB Brushless 21.5T". The list can be found on the BRCA website. The list has the following details for motors; Manufacturer, Name, Part Number, Illustration, Distributor, Detailed construction, Permitted option parts and Approval date.

4) No price limit on steering servo. Low profile servos may be used.

5) Minimum weight of the car ready to race is 1050grams

6) Gearing is limited to max pinion size of 20T. Minimum spur gear size 48T. Must be 32DP

HOT's 2.0 Litre Hot Rod Construction Rules 2023

1, Body to be ABS or Lexan and be a reasonable representation of a 2.0 Hot Rod. If using an ABS shell all windows must be cut out and if using a Lexan shell all windows to be left clear.

2, The chassis component will consist of one continuous sheet of aluminium or GRP. Chassis must extend from a minimum 10mm ahead of the front axle line and run continuously along the car to end a minimum of 25mm behind the rear axle line. The winged style chassis is permitted provided it is available in a kit from current suppliers.

3, Mardave and Kamtec type rear pod base plate, pivot ball and standard V12 spring location, or equivalent parts in shape and construction and mounting locations must be used with 2 rear springs only.

3a, Standard Kamtec/Mardave A-arm front wishbones only and must be made of plastic. Not alloy. No other front suspension is allowed.

4, Overall maximum width of the chassis to be160mm, 178 mm with body fitted. Wheelbase 205mm +/- 5mm.

5, Materials used in the rolling chassis may only be steel, brass or aluminium. Nothing else except brass and lead when used for weighting purposes.

5a, There must not be any extra holes drilled or added to allow extra flex in the chassis and must be a solid design and not slotted to achieve extra movement.

6, No damper tubes or oil filled shocks are 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 or castor in roll relative to the chassis during its full travel. Must be the two-bolt fixing type and must not be modified/elongated.

7a, Ride height and castor can be adjusted with shims or washers. Shims and washers must be made from a solid substance and be of a consistent thickness from start to finish. They must also be rigid. No wedged shaped spacers or 'O' rings are to be used on any chassis mounting points.

8, Rolling element ball bearings maybe used front and rear.

9, Tyres must have a minimum width of 25mm and a maximum of 26mm. Diameter 60mm maximum. There is no minimum tyre diameter but must always cover the entire width of the wheel edge to edge. Tyre additive is not permitted.

10, A differential is not permitted.

11, Gearing is limited to 32dp pitch for pinion and spur.

12, Z drives and alloy pods are permitted, rear height adjustable pods and axles are not.

13, Any 12th scale single bolt wheel can be used mounted to a steel axle only.

14, Powered by 4 cell brushed set up, layout is free. Motors allowed currently, HPI Saturn 20, Kamtec K21 and Schumacher's Core 21. For a Brushless alternative see separate sheet.

15, Speed controller used must have a maximum RRP of £50. A mechanical speed controller is permitted.

16, Steering servo has a maximum RRP of £50. Low profile servos are permitted provided they meet the RRP.

17, No Gt12 hybrid style of car is permitted at all!

18, The only additional holes allowed to be drilled in the chassis are for remounting of the body posts and an aerial base if used.

19, Parts from other manufacturers may be used provided they serve the same purpose as the parts they are replacing.

20, Minimum ride height is 3mm.

Bodyshells permitted:-

Peugeot 205,206, 206cc. Toyota Starlet. Vauxhall Nova std and Hot Rod. Tigra. Renault Clio, Clio V6. BMW mini.

Ford MK 3 Fiesta MK6 fiesta, Mk 7 banger shell, NO MK 7 NHR SHELLS.

21, All cars must be commercially available to buy. Anyone wishing to manufacture their own car can do so with the agreement of their regular club for test and development. If they wish to then race the car, they must make units available for purchase by others. The car must comply with all current construction rules and be of a comparable price to other manufacturers. Anybody wishing to develop or modify a car that does not comply with current construction rules has to do that test and development at their local club with their agreement. Any changes to the construction rules that allow new designs to race would need to be approved at the BRCA AGM following the correct procedure.

Bodyshells permitted:-

Peugeot 205,206, 206cc. Toyota Starlet. Vauxhall Nova std and Hot Rod. Vauxhall Tigra. Renault Clio, Clio V6. BMW mini. Ford Fiesta MK3, MK6 & Mk 7 banger shell, NO MK 7 NHR SHELLS. Mazda 323. VW Golf MK 1 hot rod.

HOT's Brushless 2.0 litre Hot Rod Option.

1) Cars to be constructed as per the HOT's 2.0Litre hotrod construction rules with the following options. Both cars will run as one class at HOT's.

2) Gearing is limited to max pinion size of 20T. Minimum spur gear size 48T. Must be 32DP

3) Powered by a hard case 1s Lipo charged to 4.20v maximum and brushless esc/motor set up.

4) ESC must be a Core RC Pace 95R Brushless esc – 1S – part number CR817. Committee to have the power to amend this if availability becomes a problem. The esc must remain in blinky mode with the led blinkin (boost set to zero and turbo timing set to 0). The esc must not be modified or changed in any way and cooling fan remain working. The external capacitors must be used.

5) The brushless motor must conform with the BRCA homologation list "EB Brushless 21.5T". The list can be found on the BRCA website. The list has the following details for motors; Manufacturer, Name, Part number, Illustration, Distributor, permitted option parts and approved date.

6) All brushless cars must run a black stripe 10mm wide through the middle of the roof grade front to rear. This is in addition to roof grade rules.

7) Minimum weight of the car to be advised but circa 950 – 1050 grms.

Committee Members

Chairman Treasurer Tech/Track/Superstox Rep Media/assistant Secretary

Currently Vacant

Rob Kerr

Lee Williams

Matt Caney

Non-Committee Officials

Website/Points Clerk

Tom Massey