



Haywards Oval Track Racers
2019 Handbook

Club Constitution	Page 2
Race & Procedure	Page 5
All Class Construction	Page 8
National Hotrods	Page 9
1300 Stockcars	Page 11
Classic Hotrods	Page 13
2litre Saloonstox	Page 14

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 January to the 31st 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 or at the AGM 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 member of the club for one year. 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, Membership 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 concerns 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 a 30% majority at an A.G.M. All elections of officers shall be decided by a straight vote of these present unless any other forms of voting mechanisms are employed.

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 in the January/February period on the most sensible date to prevent clashes with other events. The following business shall be transacted at the A.G.M: -

1. Apologies.

2. Chairman's welcome.

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

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

5. Presentation of the club's accounts.

6. Election of all officers (except Treasurer).

7. Review and agree the annual membership fee.

8. Review and agree the race fees.

9. Discussion of proposals for rule and constitution changes.

10. Discussion of any other business of which due notice has been given.

11. Arrange a provisional date for the next AGM. The date of the next AGM will be part of the membership renewal/new membership forms/pack. The current committee will stay in office until the end of the AGM, when the newly elected committee will take over the running of the club

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. No member can apply to be a committee member unless they have been an active member of the Club for at least two years.

GENERAL RACE & PROCEDURE RULES

1. Heats and finals

(a) Races to run in 5 Minute heats and 5 Minute finals. 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: Mixed heats will be used.

5. Maximum number of cars in all heats and finals will be 6 cars for non-contact classes and 8 cars for contact classes.

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: Hotrods and Classic Hotrods will use FTQ. Contact classes will use best 2 of 3.

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

9. 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 meg or 40 meg 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 to 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. The driver's roof grade MUST cover the entire of the roof.
26. Roof Grading,

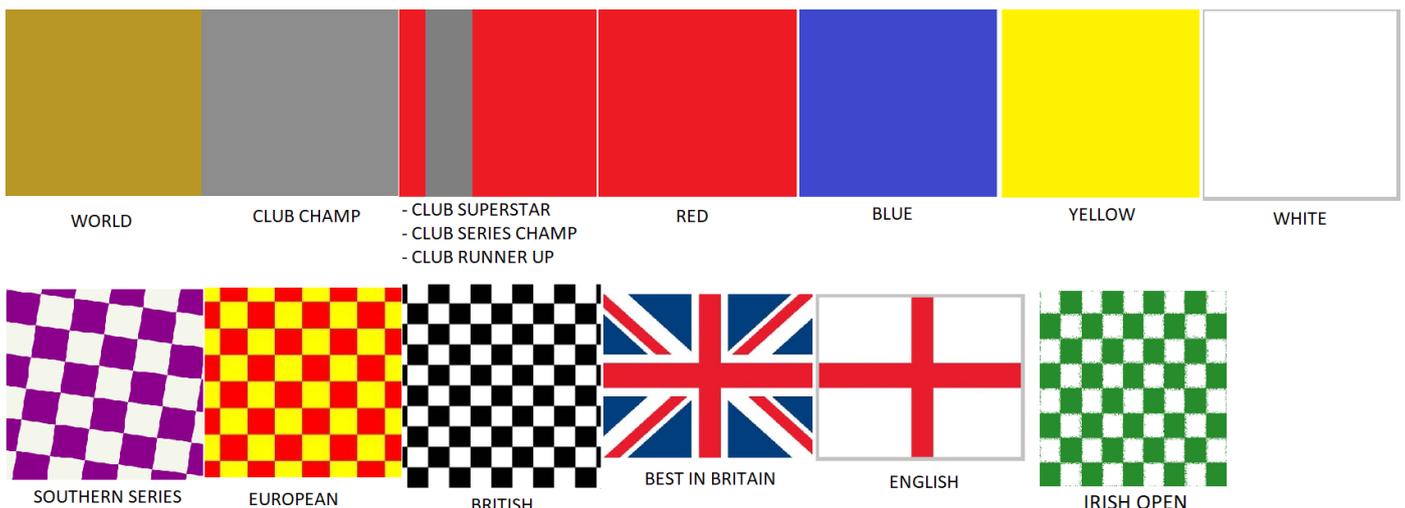
The Club Champions and Junior Club Champions to hold the Silver roof
 1st and 2nd Half Series winners (aka superstars) to hold red roof with silver stripe. If the winner already has a championship grade, the Red roof with silver stripe will go to the next possible driver.

Red

Blue

Yellow

white – for use by drivers that are R/C novice. Drivers from other r/c car disciplines would be expected to start at a minimum of a yellow grade but possibly higher at the club's discretion



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 race director's discretion.
28. No protest shall be accepted after any prize-giving ceremony.
29. Marshalling:
- a. Drivers to marshal the following heat to which they have raced.
 - 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.

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 – Mardave G2 or HPI Saturn 20T/27T motors are allowed. These must remain unopened, and unmodified - External motor bearings are NOT allowed.

Motor cleaning fluids / additives are allowed.

Gearing on brushed motors is free.

Definition of 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 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 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 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

Classic Hotrods = 17.5t brushless motor

National Hotrods = 13.5t brushless motor (brushless only class)

Saloonstox = 10.5t or 13.5t brushless motor

Brushed System:

Cars with Mardave G2 or HPI Saturn 20T/27T Brushed motors will be powered by sub C sized batteries with 1.2v nominal voltage per cell.

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

Classic Hotrods and 1300 Stockcars = 4 cell, 4.8v Nominal.

National Hot Rod Construction Rules

1, Cars to be a reasonable representation of a full size national/out law, or 2litre hot rod

2, Lexan bodies only. Wings are allowed.

3, Internal bumpers are allowed and to be made of foam only.

4, Minimum weight limit 950 grams.

5, 3mm minimum ride height.

6, Only brushless motors to be used, 13.5 turn with a max £65 RRP

7, Only 1s lipo to be used, max charging rate 10 amps, max end voltage 4.20 or lower.

8, Speedos must be in Blinky, with a max £150 RRP

9, Chassis:

Must be made from grp, be a single piece and must extend a minimum of 10mm in front of the front axle line, and minimum of 20mm behind the rear axle line.

Wheel base 205mm +/- 5mm

Max track width 160mm front and rear

No extra holes to be drilled or modifying of the chassis by the racer.

10, Rear pod:

Must be made entirely of plastic, have a rear guide pin, and twin coil springs mounted behind the rear axle line, and a single pivot ball mounted in front of the motor.

Must not be ride height adjustable.

11, Front wish bones must be of the moulded plastic type, have 2 mounting points using m3 screws or bolts, and be mounted directly to the chassis. Washers are permitted to add caster, or lower ride height. Single coil spring on each wishbone. No trailing arm hubs.

12, Front strut braces are allowed but must come with the kit, and not cause camber adjustment to the front wheels, kingpins, stubs or wishbones.

13, Fixed axle, no diffs. Axle, stubs, kingpins to be made of steel only.

14, Only single bolt wheels to be used front and rear, no GT/pan car type wheels to be used. The wheel must be of a solid construction, (no flexible wheels.)

15, Only moulded plastic spur gears and non-drive side spacers to be used. Choice of 48 or 50 tooth spurs only. Max size of pinion gear 20 tooth. (Max gearing 48 20. No fine pitch gears, 32dp only. Spur Gear may be used on both sides.

16, Bearings may be used on the front and rear axles.

17, Cars must not have:

Damper tubes, link bars, Active caster, any parts made of carbon/carbon composite. Z drives, or any type of gear carrier to mount spur gears.

18, Body Posts may be changed, and Track rods/ends may be changed.

19, No tyre additive.

20, All cars must be commercially available, no hybrid cars, or home builds.

i.e. If a LargeIT kit comes with Mardave running gear it must be raced that way, if a Mardave kit comes with Mardave running gear it must be raced that way, if a Kamtec kit comes with Kamtec running gear it must be raced that way. If other manufactures produce a kit, then it must be raced with the supplied running gear.

Choice of wheel and tyre is free from the Mardave/Schumacher/Kamtec range as long as it complies with rule 14.

Any car produced/sold/raced must use the same Manufacturers running gear on the front and rear of the car (i.e. Pod/wishbones/hubs/spur) and comply with rules 10, 11, 13 & 15

The idea of these rules is to cut costs, increase car numbers at meetings, and to make racing in the national hot rod class more accessible for current and future racers.

1300 Stockcars

- 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
 - 2a) If a home-made chassis is used, they must be made commercially available and passed by the Association.
- 3) Mardave style V12 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)
 - 3b) wishbones are to remain flat and not filed away one side to gain camber/Castor etc.
- 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. 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.
 - 4a) No internal side protection is to be used of any sort. (internal side bumpers, nerf bars etc)
- 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.
- 11) Diffs are not permitted
- 12) Gearing is limited to a 32dp pitch for pinion and Spurgear.
- 13) Z drives and alloy pods are permitted. height adjustable rear pods are not permitted
- 14) Standard slot drive rear wheels with the single wheel nut only. mounted onto a steel axle only. GT12/LMP style wheels are not allowed.

15) Powered by 4cell brushed setup. cell layout is free and open for driver's choice. Motors permitted are the Saturn 20t/27t or Mardave g2

15a) Speed controller maximum RRP of £35. Electronic speed controller or mechanical Resistor type speedo controller permitted.

16) steering servo to be of a maximum of £25 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) No in car motor cooling allowed. (Heatsinks/fans etc)

Classic Hotrod construction rules

- 1) Based on National Hot Rods up until the year 1976. Body to be ABS such as: Escort Mk1 or Mk2, Anglia 105e, Ford 100E, Cortina Mk1/Mk2, Fiat 124 (Lada shell), Classic Mini and Hillman Imp (with correct wheelbase chassis) etc. Hybrid hatchbacks (Starlets, Nova's etc) are not allowed.
- 2) Any Oval or GT12 (Zen, Schumacher etc) 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 160mm (178mm including bodyshell)
- 5) Gearing is limited to a 32dp Pitch for pinion and Spurgear
- 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. Dampers requiring seals to prevent the egress of oil 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 in roll relative to the chassis during its full travel.
- 9) Rolling element (ball) bearings are allowed on the front and rear axles.
- 10) Internal front and rear bumpers are allowed and recommended, must be foam and fitted inside the bodyshell 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 and ride height must be a minimum 3mm for chassis and body. Spur gear to have a minimum 1mm ground clearance.
- 12) Standard Mardave/Kamtec slot drive rear wheels with the single wheel nut only.
- 13) GT12/LMP style wheels are not allowed front and rear.
- 14) Diffs are not permitted
- 15) Powered by a 4cell sub-c battery nicd/nimh with speed controller maximum RRP £35. Brushed speed controller may be electronic or mechanical. Brushed motor must be HPI Saturn 20T/27T or Mardave G2.
- 16) Alternative power source can be 1s Lipo charged to maximum 4.20v with 17.5t brushless motor with a maximum RRP of £65 and brushless speed controller with a maximum RRP of £150.

2 litre saloons

- 1) Body to be ABS and representative of full size 2 litre stock car and no spoilers allowed. Windows must be fully cut out.
- 2) Any Oval or GT12 (Zen, Schumacher, Mardave, Kamtec etc) rolling chassis can be used provided it falls within the rules below. The rear pod design must use two separate working Coil Springs behind the rear axle line. The distance between the two springs is free. The two springs must be in line, neither spring may be further forward/backward down the length of the chassis than the other. Any homemade parts or outsourced parts must be made available by the instigator
- 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) 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)
- 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) Standard slot drive rear wheels with the single wheel nut only. 3 bolt GT12/LMP style wheels are not allowed.
- 13) Diffs are not permitted
- 14) Z drives and alloy pods are allowed
- 15) Two power combinations are permitted. See A & B below:
 - A) Powered by 1s Lipo charged to a maximum of 4.20 volts. A 13.5t or 10.5t brushless motor with a max RRP of £65. A Brushless speed controller with a max RRP of £150
 - B) Powered by a 4, 5 or 6 cell NiCd or NiMh battery pack. A mardave G2 brushed motor or Hpi Saturn 20T/27T brushed motor. A brushed speed controller with a max RRP of £150
- 16) all lipo batteries are subject to a voltage test 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.