



Haywards Oval Track Racers
2025 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 7. Officials 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 30 descending. 30 29 28 27 26 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. Drivers 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.
37. Season structure. The season to be split into three small championships – Winter, Summer and Autumn. The annual club championship will be a combination of the points from the winter and summer championships leaving the autumn championship to be completely stand alone. In this season format each of the three seasons will have one "drop round" where you drop your lowest score. Your lowest score can be a no show.

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

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

2Litre Saloonstox = 10.5t or 13.5t brushless motor

Outlaw F2 and Mini masters = Explained in class construction rules

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, Brushed Hotrods, Classic Hotrods, Outlaw F2 = 4 cell, 4.8v Nominal.

Outlaw F2 and Mini masters = Explained in class construction rules

HOT's Classic hot rod construction rules 2025

1. Bodies to be ABS only and be a reasonable representation of a Classic Hot Rod up until the year 1990. A foam front bumper may be fitted. Approved bodyshells are – Ford Escort mk1 & mk2, Toyota Starlet, Vauxhall Nova, VW Golf mk1, Mazda 323, Ford Anglia 105e, Ford 100e, Austin A40, Hillman imp (swb), Austin/Rover mini and clubman (swb)(Not BMW), Peugeot 205.
2. The chassis component will consist of one continuous sheet of GRP or aluminium. Must extend from a minimum of 10mm ahead of front axle line and run continuously to end a minimum of 25mm behind rear axle line. The short wheelbase chassis can be used with the appropriate body shell (Hillman imp and Mini)
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 two rear springs only.
4. Standard Kamtec/Mardave A-arm front wishbone only and must be made of plastic. No alloy or any other suspension to be used.
5. Overall maximum width of chassis to be 160mm, 178mm with body fitted. Wheelbase of a standard car to be 205mm +/- 5mm. Wheelbase of a short wheelbase car (mini/imp) to be 175mm +/- 2mm.
6. Materials used in the rolling chassis may only be steel, brass or aluminium. Nothing else except brass and lead when used for weighting.
7. 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. Extra holes permitted may be only for Body posts, transponder mount and an aerial base if used.
8. No damper tubes or oil filled shocks allowed.
9. Front suspension may be independent provided that the suspension design does not have any pivot rod or other mechanism that alters camber or castor in roll relative to the chassis during full travel. Must be two bolts fixing and must not be modified or elongated.
10. Ride height and castor can be adjusted with shims and washers. No O rings allowed on any chassis mounting point.
11. Rolling element ball bearings maybe used front and rear.
12. Tyres must be a minimum width of 25mm and a max of 26mm. Diameter 60mm maximum. There is no minimum diameter but must cover the entire width of the wheel. Tyre additive is not permitted.
13. A differential is not permitted.
14. Gearing is limited to 32dp pitch for pinion and spur. THE GEAR RATIO IS FIXED AND WILL BE 14/50. This may change at the discretion of the formula rep.
15. Z drives and alloy pods are NOT PERMITTED.
16. Any 12th scale single bolt wheel can be used and a steel axle only.
17. Powered by a four-cell brushed set up. Motors allowed to be the Kamtec K21 and Schumacher Core 21. Battery must be standard off the shelf and rated no more than 4600mah.
18. Speed controller used must have a maximum RRP of £60
19. Minimum ride height is 3mm.

1300 stock car construction rules 2025

- 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 £60. Electronic speed controller or mechanical Resistor type speedo controller permitted.
- 16) Servo choice is open.
- 17) No GT12 hybrid style cars to be used.
- 18) Additional holes may be drilled for the re-mounting of the body post, transponder mount 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 club AGM following the correct procedure

HOT's 2Litre Saloon construction rules 2025

- 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 aluminium 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 13.5t/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 club AGM following the correct procedure.

DOT Racing Outlaw F2's Construction Rules 2025

1. Models to be a reasonable representation of a full size 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 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 below.
21. Esc sky rc toro TS 50 combo, Core rc Pace 95R/100 Justock combo G3 HW38020321.
MOTORS. core rc Star, Surpass Rocket, Toro, Justock 3650SD, ORCA Stock GT, all 17.5T Fixed Timing only. MAX PRICE CAP £145
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 (no cost) (To compete in the DOT racing Superbowl and National series)
25. Any make of 1/12th Stockcar can race old or new
26. Minimum weight 1200grams

HOT's Brushed Hot Rod Construction Rules 2025

- 1, Body to be ABS or Lexan and be a reasonable representation of a 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 be 160mm, 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. The only additional holes allowed to be drilled in the chassis are for remounting of the body posts, transponder mount and an aerial base if used.
- 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.
- 15, Speed controller used must have a maximum RRP of £60. A mechanical speed controller is permitted.
- 16, Servo choice is open
- 17, No Gt12 hybrid style of car is permitted at all!
- 18, Parts from other manufacturers may be used provided they serve the same purpose as the parts they are replacing.
- 19, Minimum ride height is 3mm.
- 20, 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 club AGM following the correct procedure.

Mini Masters rules 2025

Mini Manufacturer Construction Rules and Guidance for Clubs

Overview & Intent

RC Mini Racing offers a simple, low-cost entry to RC Car Racing that is also perfect for experienced RC Racers looking for something hassle-free to race on a weekly basis.

The following construction rules have been formulated in conjunction with the car kit manufacturers and are intended to provide a universally accepted set of criteria and specifications to which these cars can be designed and manufactured. The spirit and intent of these rules is to maintain a simple, low-cost, competitive yet fair category in which technical development is limited and participation on a level playing field is actively encouraged. Changes to these rules are only permitted with unanimous agreement from the endorsing manufacturers listed below. To appear on this list, manufacturers must produce a commercially available kit that is compliant with this rule set. Endorsing manufacturers are expected to maintain and uphold the spirit and intent of Mini Class racing with use of these rules.

Endorsing Manufacturers Mardave (Chris Wilkinson) Kamtec (Keith Dowsett) BattCave (Shaun Batt)

TWR Modelsport (Harry Weymouth)

1. Overall Dimensions & Materials

- 1.1. The overall maximum width of the rolling chassis to be no more than 161mm.
- 1.2. The wheelbase of the rolling chassis must be 175mm +/-2mm. The wheelbase of the car must be the same on each side of the car; the front wishbones cannot be staggered.
- 1.3. Materials used in the rolling chassis may only be steel, stainless-steel, brass, aluminium alloy, glass fibre reinforced plastic (GRP), carbon skinned GRP (CSC) or solid plastic. The use of materials such as titanium or monolithic carbon fibre reinforced plastic (CFRP) is not permitted. 3D printed composite materials are allowed.
- 1.4. All fasteners used to assemble the car must be steel or stainless steel.
- 1.5. Identifiable weights may only be of brass, steel, or zinc construction.

2. Chassis

- 2.1. The chassis must be of single-piece construction and consist of a continuous sheet of Aluminium Alloy, Glass Fibre Reinforced Plastic (GRP) or Carbon Skinned GRP (CSC).
- 2.2. The chassis must be at least 2mm thick and extend from a minimum of 10mm ahead of the front axle centreline to at least 20mm behind the rear axle centreline.
- 2.3. The chassis must accept a 4-cell sub-C sized battery pack mounted transversely in the car. The use of in-line, offset or saddle pack battery configurations is not permitted.
- 2.4. Additional holes may be drilled in the chassis for the re-mounting of body post and aerial mast locations only. The chassis may not otherwise be modified from its original specification with the addition of holes or cutouts.

3. Rear Suspension & Axle

- 3.1. The rear axle carriers and motor mount (pod sides) must be of plastic construction. The pod sides must be rigidly attached to a flat, single piece base plate or be connected as part of the same component. This assembly is defined as the "pod". The use of metallic pod sides is not permitted. The pod sides may be braced providing the brace satisfies rule 1.3.
- 3.2. Articulation of the rear suspension must be about a single pivot ball joint. Alignment of the rear axle relative to the chassis is only allowed with use of a single, straight post mounted perpendicularly to the chassis. Articulation of the rear suspension with use of flexures, pins, side links or any other method is not permitted.
- 3.3. A maximum of 3 spring or elastomeric band attachment locations may be used to control the articulation of the rear pod
- 3.4. The use of sealed shock absorbers, damper units, damper/friction plates or straw dampers of any kind is strictly forbidden.

3.5. The rear axle height may only be set to one of two positions (high/low) to accommodate the diameter of the tyres. This setting may only be achieved with;

- a) The provision of 2 separate fixed axle height pods
- b) The provision of a pod that allows only 2 axle heights which are set using a single design of reversible insert supplied in the car kit. Fine adjustment of the rear axle height relative to the pod plate using eccentric bearing carriers, shims or any other method is not permitted.

4. Front Suspension & Steering

4.1. 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.

4.2. The caster angle must remain constant throughout the range of front suspension travel.

4.3. A maximum of 1 spring location may be used to control the articulation of each front stub axle.

4.4. Front wishbones must be of plastic construction and attach rigidly to the chassis using a maximum of 2 fixings per side.

4.5. Front suspension must be of the sliding kingpin/hub design. Kingpins must be steel or stainless steel and not include any features designed for the transmission or storage of lubricant or fluid.

4.6. Steering hubs must be solid plastic with no separate bushes or guides as part of their construction. Front stub axles must be steel or stainless-steel and be 4mm in diameter.

4.7. Front caster, camber and ride height may only be adjusted with shims, washers, wedge spacers or via a designed feature of the front wishbone. Optional camber braces are permitted but must be of the same generic design as one which is supplied as part of the rolling chassis kit. Camber braces must be of single piece construction and not adjustable.

5. Drive System, Wheels & Tyres

5.1. Rolling element (ball) bearings are permitted on the front and rear axles. Front axle bearings must not be flanged.

5.2. The rear axle must be of solid, single piece construction and have a minimum length of 146mm. The rear axle must be of steel or stainless-steel construction. Differentials and limited slip devices of any kind are strictly forbidden.

5.3. Drive must be to the rear wheels only and via Z-drive or Dog-drive (Slot drive) only. Hex drives or pin drives are not allowed. Wheel retention must be via a single M3 threaded fixing and on the axle centre only. 5.4. Only 32d.p. drive gears may be used.

5.5. Maximum wheel diameter 40mm, minimum 38mm. Maximum wheel width 26mm, minimum 20mm. Tyres

to have a maximum 26mm width, maximum 60mm diameter and no minimum diameter. Tyres must cover the complete surface of the wheel rim from edge to edge.

6. Bodyshells

6.1. Only commercially available bodyshells that appear on approval lists compiled by race organisers may be used.

6.2. Windows must remain clear and may not be cut out. Additional holes/openings in the bodyshell other than those used for mounting to the car or attaching a wing are not permitted.

6.3. Only one wing is allowed on the bodyshell. Wings may not extend beyond the rearmost point of the bodyshell or be more than 15mm above the roof of the bodyshell. Wings must also satisfy the following dimensional specifications.

- Maximum width 160mm

Maximum length 35mm

- Maximum height (including end plates) 25mm

6.4. Headlights and grilles must be defined and clearly contrasted from the surrounding body colour.

6.5. The body shell must be securely attached to the chassis at all times whilst the car is on track. Body shells must not have any sharp edges or corners which could cause harm to other racers/marshals, damage to other cars or the racing surface.

7. Accessories and Optional Parts

7.1. Foam or 3D printed TPU bumpers may be fitted to the front of the chassis. Use of a rear bumper or other cosmetic attachment to the chassis is optional.

7.2. Modification of kit supplied parts and use of homemade or non-standard parts is not allowed unless explicitly stated in these rules.

7.3. The use of prototype parts, one-offs or mixtures of parts/assemblies that are not supplied as part of a commercially available kit is not allowed. Only manufacturer approved optional parts may be fitted providing their design also conforms to these rules and they are commercially available at least 4 weeks prior to the event in which they are used.

7.4. Car kits must have been commercially available for a minimum of 4 weeks prior to use at an organised event.

Version History

V1.0 - Initial Draft - 25/02/2024

V1.1 - Electronics & Bodyshell Sections Added - 28/02/2024

V1.2-Manufacturer Requested & Other Changes Made - 01/03/2024

V1.3-Electronics moved to an Appendix-07/03/2024

V1.4- Clarifications added to 3.3, 4.5 & 4.7.5.6 (tyre additives) and 7.3 (option parts) removed. 3.1 modified to ensure compliance of all existing pod designs. 2.3 (chassis braces/stiffeners) removed. Appendices section (Electronics) removed - Procedural Rules to be collated separately - 10/03/2024

V1.5-3.5b modified to state "insert", 1.3 & 2.1 modified to permit use of CSC, Spirit and Intent reference added to Overview section - 23/03/2024

Mini Masters Brushed Rules

The following rules form the rules specific for the Brushed class and are in addition to the general construction rules above.

1 Gearing

1.1 32dp only.

1.2 15, 16, or 17 tooth pinions ONLY.

1.3 46, 48 or 50 tooth spurs ONLY.

2. Motor

2.1 Mardave G2 F20 (#G2 F20), Core 21 Silver Can (#CR711) and Etronix Sport 540 Tuned Stock 20T (ET0320) only, these cannot be tampered with in anyway, motors may be water bathed, Motor additives are allowed. Motor Spacers can be used.

3. Speed Controller

3.1 Any commercially available brushed speed controller with a list price of less than £60.

4 Batteries

4.1 Batteries must be made up from 4 Sub-C Metal Hydride cells. Pack may be in "stick" or "saddle" format. These must be readily available to purchase. Batteries may be wrapped but the club can ask for the wrapping to be removed for inspection if required.

5 Servo

5.1 Any commercially available servo with a list price of less than £50.

Mini Masters Brushless Rules

The following rules form the rules specific for the Brushless class and are in addition to the general construction rules above.

1 Gearing

1.1 32dp only.

1.2 Any 32dp pinion gear.

1.3 Any kit specific spur gear.

2 Motor

2.1 Any 25.5 brushless Fixed Timing, sensored motor. Motors must be readily available.

3 Speed Controller

3.1 ESC must meet the following criteria:

- Must have a Blinky mode that can be enabled
- No boost can be run
- No turbo can be run
- £80 max limit

3.2 Recommended ESC's

- XR10 JUST STOCK Zero Timing (HW3011200)
- XR10 JUST STOCK G3 (HW30112003)
- XR10 JUST STOCK G3s (HW30112005)
- Surpass Supersonic 120A ESC: SP-6000-11 (discontinued) (Flashing Blue for Blinky mode)
- Surpass Supersonic 100A ESC: SP-6000-12 (current model) (Flashing Blue for Blinky mode)

4 Batteries

4.1 Batteries must be 7.4v or 7.6v (2 cell) commercially available (in the UK) hard cased LiPo batteries.

4.2 Batteries must be charged to a maximum of 8.40v whilst connected to a charger/discharger.

4.3 Batteries must be securely placed in a LiPo sack.

4.4 Batteries must be charged or discharged using a LiPo charger on the LiPo settings and must not be charged in excess of the manufacture's guidelines or over 15A, whichever is lower. When discharging this must not

be in excess of the manufacture's guidelines or over 20A, whichever is lower.

4.5 No heating or cooling of cells are allowed during charging or discharging.

5 Servo

5.1 Any commercially available servo with a list price of less than £50.

Committee Members

Chairman

Bob Massey

Treasurer

Rob Kerr

Secretary/Website

Tom Massey

Media/Scrutineer

Matt Caney

Junior Rep

Hannah Ward