QUARTERSCALE SPEEDWAY RULES

RCRA REMOTE CONTROL RACING AUSTRALIA

RACING RULES & CAR SPECIFICATIONS

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Version 9.0 – October 2026

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Participants in all classes must be 12 years of age or older, however a child under the age of 12 may be eligible to compete at a State or National Title if the committee of where the child holds a membership deems the child is at a suitable level to compete, the onus is then on that committee for the child`s actions at any given event. This special dispensation is required for all children for every RCRA event until they are 12 years of age.

To be eligible to race any event the participant must be a financial member, have competed in a minimum of 3 club meetings as a financial member.
Interstate or Overseas visitors are expected to be a member of their local club.
This decision is at the discretion of the Chief Steward for each event.
Only One (1) Car/Complete Chassis permitted per driver in each class per day.

By nominating for a state or national title, you are accepting of the RCRA Code of Conduct. These rules are run in conjunction with the AARCMCC Constitution.

Rules to remain in force for a minimum period of 12 months, any changes to be voted on by all financial club members at their AGM or EOGM. Each state will be allocated 1 vote on the rule change proposals.
There are to be no new classes introduced into RCRA Quarterscale for a minimum 3-year period, until at least 2025. No new classes are to be introduced that or similar or have the same class classification that is already listed in this rule set.

Version 9.0 – October 2026

1. RACE FORMAT

1.1 There will be one annual event called Australian Championships/Titles to determine the Australian Champions in Quarterscale Speedway. At this event there will be a Section Meeting held at a time suitable by the host club.

1.1A Australian Title Appointment.

The annual Australian Championships/Titles event will be on a rotating roster.
(Affiliated Clubs Only)
VIC – WA – SA – QLD - NSW
If there are multiple clubs in one state it is rotated through on that state's rotation.
If the club next on rotation cannot or does not wish to hold an event it moves to next in rotation.
No State can hold the National titles 2 years in a row.
In the event of a pandemic the rotation will halt until such time that the allocated state can hold the event, the only time in which a state would forfeit their turn would be for a severe weather event.
There will be one annual State Championships/Titles to determine State Champions in each state. The RCRA Australian Titles will be held over Easter each year unless majority of clubs agree to a date change.

1.2 Participants must be a financial member of a Quarterscale Club to participate at the Australian or State Championships. (Each member must be allocated a Race Number and State Prefix)

1.2A Race Day Format

All heats and finals will be run on the same day per class.
Saturday: Speedcars, Wingless and Late Model run their Heats and Finals.
Sunday: Sprintcars, Dirt Mods and AMCA run their Heats and Finals.
Sedans: If only WA entries are received for the Australian Championships/Titles, they can hold their own Stand-Alone event in WA whenever they see fit. If just one entry outside of WA is received for Sedan class, then this class will be added to either Saturday or Sundays Format, whenever suitable to the host race director.

The days and classes listed above are an example only, what classes are running on what days would come down to competitor numbers for each class and be the decision of the host club race director.

1.3 There will be a driver meeting before practice of any event on any given day. The format of this practice session is at the discretion of the Chief Steward; however, it is limited to a maximum of 10 mins. This is to facilitate testing of overnight equipment changes and transponder checks.

1.3A Interstate Practice

There is to be a minimum 3-hour Practice Session for all competitors that are not a member of the host club on the Friday before the first day of competition, if this cannot be completed, then a minimum of 1 hour before the first day of competition is required.

1.4 Points for Heats are tabled below:

DNF (Did Not Finish) is allocated Zero (0) Points

POSTION	POINTS
1st	15
2nd	12
3rd	10
4th	8
5th	6
6th	4
7th	3
8th	2

2. RACE PROCEDURE

2.1 Duration of the races:

2.1.1 Heats: 10 Laps

2.1.2 Finals: C Main: 15 Laps
B Main: 20 Laps
A Main: 30 Laps

2.1.3 There must be a minimum of 6 cars nominated in each class for that class to be run at a National Event.

2.1.4 There must be a minimum of 4 cars nominated in each class for that class to be run at a State Event.

2.1.5 The arrangements of the Heats are as follows.
State Titles: Minimum 4 Heats per Class + Final(s)
Australian Titles: Minimum 4 Heats per Class + Final(s)

2.1.5 All drivers are to get a Front; Middle and Rear row start for their Heats or as fair as possible.

2.1.6 All States are to be separated into different Heats or as fair as possible.

2.1.7 Each class is to run for the duration of one day only, all heats and finals for those classes are to be ran on the same day.

2.2 Finals

2.2.1 The 10 highest placed drivers from the heats will qualify directly into the A Main. Top 4 Drivers from the C Main will transfer to the back of the B Main. Top 2 Drivers from the B Main will start 11th and 12th in the A Main.

2.2.2 A minimum of Fifty percent (50%) of the heat races must be attempted before a competitor can compete in a Final.

2.3 Number of Drivers

2.3.1 Heats: Maximum 8 drivers.

2.3.2 A Main Final: Maximum of 12 drivers.

2.3.3 The race format will be notified in the event information and invitation material.

2.4 Starts

2.4.1 For the A Main final, drivers with the highest points may choose their position on the drivers stand.

2.4.2 All starts for Quarterscale Speedway will be rolling, starting with (P1) driver setting the pace.

2.4.3 The official start signal will be audible by means of a siren and or green light/flag, operated by the starter. This signal will also start the Timing System.

2.4.4 Delayed starts. (Finals Only) As long as the starter has not called the cars to the start line, any participant may request a delay of 10 minutes to conduct repairs on their car, this delay can be granted only once for each final. - The track is closed unless the delay is requested because of frequency or radio problems.

2.5 Starting Procedure of Heats

2.5.1 There must be a minimum 3-minute gap between the end of one heat and the start of the next heat and there must be at least two (2) ten-minute breaks between the four (4) heats.

2.5.2 An audible warning will be given then the drivers will be called to the starting grid at the starting time an audible signal will be given for a rolling start, and the timing system started.

2.6 Completion of Heats & Finals

2.6.1 When the race is over, an audible siren is sounded, and red light/flag will show. A car finishes when it passes the finish line after the finish-signal is given.

2.6.2 In case of doubt (on the finish-line when the laps are completed), a car may race one more lap and finish. Whether they finish or not when time was completed, is up to the Timekeepers and cannot be disputed. Red Light/Flag will be shown after the chequered flag to signal race is complete.

2.6.3 After returning to the entry gate, the engine must be stopped immediately.

2.6.4 On completion of the final for each class the top five (5) competitors must enter Parc Ferme` for scrutineering. If three (3) or more cars are found non-compliant and are disqualified, then the next place finisher *(must have received chequered flag*) beyond 5th will be elevated as required without needing scrutineering.

2.7 Qualification Order & Finals

2.7.1 After all heats have been completed the Qualification order is established, by taking the best result in each heat of each driver. Points will then be tabled to work out the grid positions for the finals.

2.7.2 In some cases there may be a pole shuffle. (Time dependant, decision is up to race director) Pole Shuffle is for the Top 10 Drivers that qualified straight into the A Main

2.7.3 In the case of more than one driver recording identical points after all heats, the driver finishing with the highest place finish in the last heat is classified as the faster, e.g., count back heat by heat. Driver "A" finished heat 5 in 3rd, Driver "B" finished heat 5 in 5th, then Driver "A" is deemed the highest point's scorer on a count back. If still no result the driver with the fastest lap will be the winner.

2.7.4 Finals are run according to the schedule printed in the official race program, which may only be changed by State Delegate's majority vote or Chief Steward

2.8 Wet Track Situation

2.8.1 Racing will take place on a damp track with no standing water. The decision on whether a track is wet or too rain affected will rest with the Chief Steward.

2.9 Race Interruptions

2.9.1 In the case of a race, which is interrupted for more than 60 minutes for reasons beyond the control of the organisers, Chief Steward will decide whether to cancel or continue the meeting.

2.9.2 In the case of an interruption of a heat the entire heat will be re-run.

2.9.3 In the case of an interruption of finals the following procedure will be used:

2.9.3a If 20 or more laps have been run in the A Final, the results at the time of the Interruption will be the result. For C and B Finals the entire race will be re-run.

2.9.3b When the interruption takes place less than 20 completed laps the race is determined a non-event and will need to be re-run in its entirety.

2.9.3c At the moment of the interruption of the race, the drivers will leave their vehicles on the infield under the control of the Chief Steward. (Unless the stoppage is for wet weather, at which the cars will be kept in an undercover location under the control of the Chief Steward) They will be required to switch

off the radio and stop the engine. No repairs are to be conducted to the vehicle; the cars are to remain in a parc ferme condition. Any driver who does not observe this rule will be immediately disqualified. A 10-minute delay may be called again at the resumption of racing for a broken pull start only, this delay can only be called once.

2.10 Rain Procedure During Heats

2.10.1 The Chief Steward is solely responsible for the decision to stop a race in the event of rain.

2.11 Interruption of Finals / Event

2.11.1 In the event that Sub Finals or Finals cannot be run, due to ANY reason. The final event classification will be decided on qualifying results. - For this clause to take effect – All Heats must be run in their entirety.

3. TECHNICAL INSPECTION

Scrutineering is to be conducted after practice and before the first round of heats. There is to be at least one random scrutineering to be conducted across all classes per day.
Under all circumstances it is the responsibility of the driver that their car is within the RCRA rules during a race meeting. If a car is found illegal during heats, or finals, its result will be made void and the car must stay in technical inspection until the result is published and the protest time is over. Car engines may be pulled down after any Title Event

4. TRACK MARSHALS

Drivers will function as marshals a per the Chief Stewards requirements. (Marshals are required to wear a high visibility vest when entering the racing arena) All marshals will be over the age of 16 years, marshals will only be admitted onto the racing arena when the red light is on and when all cars are stationary, except for when a vehicle has lost radio signal and is not in control by its driver.
Marshals can also provide on track maintenance (see below) to any vehicle that requires it.
It is not compulsory for interstate competitors to marshal at State or Australian Titles; however, they can do so if they see fit.

5. ON TRACK CAR MAINTENANCE

All Reds are considered “open reds” The marshal may do minor repairs (no tools, no parts to be added from outside the racetrack unless they are from the said car that started the race; see note below) to a competitor’s cars at a race stoppage, if maintenance is performed on the

offending car for the stoppage that car will restart at ROF, if maintenance is performed on a non-offending car for the stoppage, that competitor will hold their position.
If a flameout occurs the marshal can restart the car, each car is allowed a maximum of two (2) pull starts on the third flame out the car will be retired from the race and remain on the infield. The marshal is the only person permitted to work on the car in the racing arena however work on a car is permitted by driver or pit crew at the pit gate under the supervision of the marshal or an official. There is a maximum of 2 minutes to work on the car. The said car can only be worked on once by the driver or pit crew, the second time the car will be shown the black flag and retired to the infield, or the marshal will remove it from the racetrack.
NOTE: Tools may only be used to clear a blocked exhaust pipe outlet!

6. STARTS and RE-STARTS SPEEDWAY RULES (COMPRESSED)

6.1.1 Start Rules: Drivers to grid up on back straight, all drivers will start in formation 2 wide with lead car (P1) to maintain even pace until the Acceleration Zone, racing starts as soon as the lead driver takes off between the AZ and the Start/Finish Line then the green light/flag and or audible sound will be given.

6.1.2 If a race is stopped before the last running car completes the first lap, a complete restart shall be ordered. The complete restart will be the same order as the original grid order. After 3 failed attempts a single file start will be ordered with cars one (1) metre apart.

6.1.3 If a race is stopped after one completed lap then the restart shall be done in single file with the lead driver setting the pace. Drivers will grid up on the back straight with lead car to maintain even pace until the Acceleration Zone, racing starts as soon as the lead drivers takes off between the AZ and the Start/Finish Line then the green light/flag and or audible sound is given, failure to do this will result in a restart. 3 false starts and the offending car(s) will be sent to ROF. There should be no disadvantage to any car within the field**. (Timing system always counts back to last completed lap.)**

6.1.4 If a Race Car breaks formation or jumps the start / re-starts from within the field, the Chief Steward will stop the race, and the Driver will be sent to ROF.

6.1.5 In any restart, lapped cars are to take their positions as per the last recorded lap in order of placing behind those cars on the current lap.

7. RACE STOPPAGE

Any car(s) considered by the Chief Steward and or Race Control to be considered primary cause of an accident that caused a race stoppage will go rear of the entire field including lapped cars but will stay on the current lap they are on. Each stoppage caused will see the driver awarded 1 Strike, in addition if Race Control/Chief Steward deems a driver to have caused an unsportsmanlike (professional foul) stoppage, they will be awarded 2 Strikes. If a driver has incurred 3 Strikes, they will be shown the Black Flag and sent infield whilst the race continues. A pull start does not constitute a strike.

7.1 MECHANICAL DEFECT

A car will be shown the black flag if it is deemed it cannot safely continue due to sustaining damage and or has missing component(s) or is deemed to be hindering other competitors on the track.

8. UNSPORTSMANLIKE DRIVING

If it is considered a driver has gained a position or advantage by passing or driving in an unsportsmanlike manner, the driver will be penalised 2 positions for every car passed. This will apply to each car passed. This penalty will be applied at the first available opportunity, i.e., race stoppage or on the race results. Examples of unsportsmanlike driving include but not limited to:

- Passing or driving on the infield to gain an advantage (anything more than the left-hand front wheel under the pole line)
- Contact that causes an incident but does not instigate an immediate race stoppage.

Intentional interfering or targeting of another driver will incur an immediate black flag, disqualification from the race and possible disciplinary action.

9. TRACKS

Tracks for Quarterscale Speedway racing will be inspected by RCRA Officials regarding safety provisions for drivers, mechanics, marshals, and spectators. RCRA Officials have the authority to ask for improvements to be conducted before racing starts. Track size to qualify to host RCRA events shall have a minimum of 65 Metres with a Maximum of 135 Metres on the pole line and a minimum of 5 Metres wide.

10. PROTESTS

A protest may be called if a competitor believes another competitor is not complying to the rules or believes the results published are incorrect. Results are to be printed and displayed within three (3) minutes of a race ending or be made available electronically at major events (not mandatory on club days). A protest is to be in writing and handed to the Chief Steward within 10 minutes of the end of the race or published results, there is also a fee of $50 for the protest; this fee will go to the host club of the event. If a protest occurs the competitor will be asked to show their car for technical inspection, in the case of the engine being subject of the protest, the competitor will be asked to remove the engine from their car at the end of the day and pull it down in front of officials in a clean environment. If the competitor is found to be compliant, he/she will be issued a gasket kit free of charge to put their engine back together after the inspection is complete. The host club after the A-Main finals may pull down any engine after the event as they see fit or at the discretion of the Race Director/ Chief Steward.

11. COMMUNICATION DEVICES

No communication devices e.g., headsets or any other device is to be used on the drivers stand by a competitor and their pit crew. Only host club officials are permitted to use such devices.

12. TECHNICAL INFRINGMENTS

If your car is deemed illegal, the driver of this car may receive a 12-month ban from the sport.
If you are caught using two (2) different (complete) cars/chassis in the one day of an event you will be excluded from the event.
Cheating will not be tolerated on any level. **The driver is always solely responsible for the vehicle.**

13. GLOSSARY OF TERMS

Commercially Available: sold in a shop/store/online, available for anyone to purchase currently or in the past.
Brakes Must be fitted and operational: Brakes when applied must have resistance to slow the car significantly.
Components: A part or parts or element of a larger whole i.e., bolt on parts
Standard: Used or accepted as normal or average, refers to typical, stock, or regular.
Race Director/ Chief Steward: Person(s) in charge of the event.
Race Control: Person(s) in control of the race, usually in the timing box, includes flag wavers.
Gear Ratio: Refers to the Ratio that is the Pinion and Spur Gear combined only.
Third Channel Remote Killswitch/Failsafe: Refers to a third-party electronic device connected to the vehicle's receiver; this device serves two purposes:

1. Allows a competitor to remotely kill the engine of their vehicle by selecting a pre-determined button or switch on their transmitter.
2. The failsafe function of this device kills the engine when the signal is lost between the vehicle's receiver and transmitter, the failsafe may also be activated when battery power to the receiver is lost.

When testing this device for scrutineering the transmitter`s power is required to be powered down to prove that the failsafe function is (a) set up correctly in the transmitter and (b) functioning properly in the vehicle. Once a transmitter is powered down the vehicle's engine should be killed with 4 seconds.
Wing(s): An aerodynamic device designed to produce downward vertical force, known as downforce, as air passes above and underneath it (aerofoil). Dirt Mods fitted with a wing type design on the front is acceptable, providing the air passes underneath the entire front end of the chassis only.
Chassis/Frames/Cages: Nominated tube size may vary up to ten (10%) percent. Nominated sizes are bare metal.

14. RACE NUMBERS

14.1.1 Must be minimum 70mm high and 50mm wide each number.

14.1.2 Must be fitted to both sides of the vehicle and roof for the Dirt Modified, Late Model, Sedan, and AMCA classes. Fitted to the outer wing boards for Sprintcar class and to both sides of the tail tank for Speedcar, Wingless and Sprintcar class, may also be fitted to both sides of the body for the Wingless class. All State and National Champions numbers at sanctioned events are excepted only. All numbers for all classes are to be in contrasting colours to the body/tail tank of the vehicle.

14.1.3 Number must have state letter adjacent to side numbers.

AT = AUSTRALIAN CAPITAL TERRITORY
N = NEW SOUTH WALES
NU = NEW SOUTH WALES UPPER HUNTER
NT = NORTHERN TERRITORY
Q = QUEENSLAND
QB = QUEENSLAND BUNDABERG (CORAL COAST)
QM = QUEENSLAND MARYBOROUGH
QS = QUEENSLAND SOUTH
S = SOUTH AUSTRALIA
V = VICTORIA
W = WESTERN AUSTRALIA

14.1.4 Current State Champion may display number #1 next to their state letter.

14.1.5 Current Australian Champion may display A1 as their number.

15. MANDATORY EQUIPMENT

15.1.1 Third Channel Kill switch/Failsafe's must be fitted in all vehicles and be operational.

15.1.2 Each vehicle must have a motor kill switch button fitted and maybe identified by a blue triangle on the body. (except Sprintcars, refer rule 15.1.3)

15.1.3 Sprintcars must have a motor kill switch button fitted to top right-hand rear of roll cage and may be identified by a blue triangle.

15.1.4 Only digital 2.4ghz Band Radios permitted.

15.4.5 One (1) Transponder is to be fitted as near as possible to front axle.

'D' boxes/and or gyros are NOT allowed, includes any type of assistance e.g., AVC.

SPRINTCAR SPECIFICATIONS

1. GENERAL

1/1: Appearance must resemble a full size Sprintcar.

1/2: Must be fitted with wings and nerf bars to resemble a full size Sprintcar.

1/3: All measurements for this model are measured from extreme points.

2. MODEL DIMENSIONS

2/1: **LENGTH;** maximum 990mm

2/2: **WIDTH;** maximum 508mm (measured to outside of tyres)

2/3: **CHASSIS;** Minimum height 290mm, Maximum height 320mm

2/4: **WHEELBASE;** Minimum 508mm, Maximum 609mm

3. ENGINE

3/1: Maximum engine capacity 25.4cc (26cc) as supplied by engine manufacturer (26cc barrel kit may be fitted to smaller engines but must be same specification i.e., 25.4cc standard 28mm crank non-stuffed.)

3/2: Engine must remain stock internally, **NO** internal modifications allowed.

3/3: Air/fuel intake and exhaust may be modified (as per modifications outlined below)

3/4: Permitted engines are: Zenoah G230RC / G240RC / G260RC / G270RC /

Or equivalent CY R230 / R260 / F230 / F260 FUELIE engines

3/5: Reed valve engines are **NOT** allowed.

3/6: Ignition system must remain standard as per engine manufacturer including spark plug lead.

3/7: Flywheel must remain standard.

3/8: Clutch must remain standard as fitted to listed engines 6k-8k.

3/9: Aftermarket Pull Start permitted with catch fitted on Flywheel.

3A. ENGINE MODIFICATIONS

3A/1: **EXHAUST;** Non-standard exhaust is permitted and must not be longer than the body and be contained within the side nerf bars.

Noise must not exceed 95Dba from 10M from the model using an approved measuring device.

3A/2: **INTAKE;** Carburettor from listed engines only WT-603(x), 668, 989, (997), 771, 813 (998) and 990 Bearing Modification on main shaft allowed. Removal of Choke shaft allowed. Genuine Walbro Spiral Diaphragms permitted.

3A/3: intake manifold / Air filter is open; rotation of carburettor is allowed. Maximum length of insulator block is 31mm including gaskets.

3A/4: Spark plug may be changed no restrictions.

3A/5: Porting and polishing is **NOT** allowed.

4. DRIVELINE

4/1: Rear wheel drive solid axle only with Belt / Chain / or Locked Differentials

4/2: Multi speed gearboxes are **NOT** allowed.

5. FRONT AXLE

5/1: Solid beam axle only **NO** independent allowed

6. CHASSIS

6/1: Tube type maximum outside diameter 12.7mm

6/2: Plate type maximum thickness 6.3mm

7. NERF AND CRASH BARS

7/1: Steel maximum outside diameter 8mm

7/2: Aluminium maximum outside diameter 9.5mm

8. BRAKES

8/1: Must be fitted and operational.

8/2: No restriction and type or number of brakes fitted.

9. SUSPENSION

9/1: Independent front or rear is **NOT** ALLOWED

9/2: Torsion bar or coil spring in any combination front and rear allowed.

9/3: Maximum of 4 shock absorbers

10. WHEELS AND TYRES

10/1: Front tyres maximum diameter 160mm, width 70mm

10/2: Rear tyres maximum diameter 180mm, width 120mm

11. WINGS

11/1: Top wing- Maximum 460mm long x 380mm wide centre / 410mm (including sides)

Top sides - Maximum 460mm long and 190mm high

11/2: Front wing- Maximum 165mm long x 235mm wide (including sides)

Front sides- Maximum 165mm long x 75mm high

11/3: Mounting of wings – must be solid mount (fixed)

12. FUEL / TANK

12/1: Fuel: Pump Unleaded / premium unleaded with oil additive only. No other fuels or additives are allowed.

12/2: Tank: Must be mounted securely within model and made from leak proof material

RCRA REMOTE CONTROL RACING AUSTRALIA

SEDAN SPECIFICATIONS

1. GENERAL

1/1: Appearance must resemble full size late model or super sedan.

2. MODEL DIMENSIONS

2/1: **LENGTH;** maximum 1220mm

2/2: **TRACK WIDTH;** maximum axle track 508mm (measured to extreme outside of tyres/wheel.)

2/2.1: **OVERALL WIDTH** maximum 580mm with Body Fitted.

2/3: **HEIGHT;** maximum 343mm

2/4: **WHEELBASE;** minimum 558mm maximum 660mm

3. ENGINE

3/1: Maximum engine capacity 25.4cc (26cc) as supplied by engine manufacturer (26cc barrel kit may be fitted to smaller engines but must be same specification i.e., 25.4cc standard 28mm crank non-stuffed.)

3/2: Engine must remain stock internally, **NO** internal modifications allowed.

3/3: Air /Fuel intake and exhaust may be modified (as per modifications outlined below)

3/4: Permitted engines are: Zenoah G230RC / G240RC / G260RC / G270RC /

Or equivalent CY R230 / R260 / F230 / F260 FUELIE engines

3/5: Reed valve engines are **NOT** allowed.

3/6: Ignition system must remain standard as per engine manufacturer including spark plug lead.

3/7: Flywheel must remain standard.

3/8: Clutch must remain standard as fitted to listed engines 6k-8k.

3/9: Aftermarket Pull Start permitted with catch fitted on Flywheel.

3A. ENGINE MODIFICATIONS

3A/1: **EXHAUST:** Non-standard is permitted and must not be longer than the body and be contained within the body, noise must not exceed 95Dba from a distance of 10M from the model using an approved measuring device.

3A/2: **INTAKE;** Carburettor from listed engines only WT-603(x), 668, 989, (997), 771, 813 (998) and 990 Bearing Modification on main shaft allowed. Removal of Choke shaft allowed. Genuine Walbro Spiral Diaphragms permitted.

3A/3: Non-standard / intake manifold / air filter allowed; rotation of carburettor is allowed. Maximum length of insulator block is 31mm including gaskets.

3A/4: Spark plug may be changed no restrictions.

3A/5: Porting and polishing is **NOT** allowed.

4. DRIVELINE

4/1: Rear wheel drive solid axle only with Belt / Chain / or Locked differential

4/2: Multispeed gearbox is **NOT** allowed.

5. FRONT AXLE

5/1: Beam or independent allowed

6. CHASSIS

6/1: Full length chassis to be constructed from maximum 10mm round tubing or 16mm box type. Plate chassis or partial plate chassis not allowed. Mounting plates allowed.

7. NERF AND CRASH BARS

7/1: Rear crash bar may be fitted but must be inside of body.

7/2: Front and side bars are allowed but must be contained within body.

8. BRAKES

8/1: Must be fitted and operational.

8/2: No restriction on type or number of brakes fitted.

9. SUSPENSION

9/1: **FRONT:** May be independent or solid with torsion bar or coil over.

9/2: **REAR:** Solid axle only with torsion bar or coil over independent **NOT** allowed.

9/3: More than 4 shocks are permitted; must resemble full size car.

10. WHEELS AND TYRES

10/1: Front tyres maximum diameter 170mm, width 75mm

10/2: Rear maximum diameter 178mm width 114mm

10/3: Tyres shall not protrude more than 10mm outside the body when measured with the wheel set parallel to the body.

11. WINGS

11/1: No higher than roof line

11/2: Side dams no higher than roof line

12. FUEL / TANK

12/1: Fuel: Pump Unleaded / Premium unleaded with oil additive only. No other fuels or additives allowed.

12/2: Tank: Must be mounted securely within model and made from leak proof material

RCRA REMOTE CONTROL RACING AUSTRALIA

DIRT MODIFIED SPECIFICATIONS

1. GENERAL

1/1: Appearance must resemble full size Australian V8 Dirt Modified Speedway Car (*see figure 1.1)*

1/2: Must be based on Baja 5B Platform from the following Manufacturers: HPI / Rovan Sport / King Motor

1/3: Body is mandatory see body specifications below.

1/4: Aluminium / carbon fibre / plastic / titanium upgrade to replace plastic parts and other stock parts permitted (must be commercially available)

1/5: All measurements for this model are measured from extreme points.

2. MODEL DIMENSIONS w/BODY FITTED

2/1: **MODEL LENGTH w/Body Fitted (OVERALL Length):** Maximum 910mm.

2/2: **MODEL WIDTH FRONT:** Maximum 490mm

2/3: **MODEL WIDTH REAR:** Maximum 520mm

2/4: **BODY:** must be made from Plastic / Aluminium or Fiberglass

2/5: **BODY:** Maximum thickness of body panel material Plastic 5mm / Aluminium & Fiberglass 1.2mm

2/6: **BODY:** Maximum width 480mm

3. ENGINE

3/1: Maximum engine capacity 25.4cc (26cc) as supplied by engine manufacturer (26cc barrel kit may be fitted to smaller engines but must be same specification i.e., 25.4cc standard 28mm crank non-stuffed.)

3/2: Engine must remain internally stock, **NO** internal modifications allowed.

3/3: Air filter and exhaust may be changed (as per modifications outlined below)

3/4: Permitted engines are: Zenoah G230RC/G240RC/G260RC/G270RC or equivalent CY R230/ F230/R260/F260 or FUELIE (KS) engines and equivalent Rovan / King Motor Engines

3/5: Reed valve engines are **NOT** permitted.

3/6: Ignition system must remain standard as per engine manufacturer including spark plug lead, mechanically fixed timing coil only.

3/7: Flywheel must remain standard.

3/8: Clutch must remain standard as fitted to listed engines 6k to 8k springs.

3/9: Aftermarket Pull Start permitted with catch fitted on Flywheel.

3A. ENGINE MODIFICATIONS

3A/1: **EXHAUST:** Non-standard is permitted and must not be longer than the body, must be contained within the body. Engine Noise must not exceed 95Dba from 10M from the model. Using an approved measuring device.

3A/2: **INTAKE;** Carburettor from listed engines only WT-603(x), 668, 989, (997), 771, 813 (998) and 990 Bearing Modification on main shaft allowed. Removal of Choke shaft allowed. Genuine Walbro Spiral Diaphragms permitted.

3A/3: Non-standard Intake manifold / Air filter is allowed. Maximum length of insulator blocks 31mm including gaskets.

3A/4: Spark plug may be changed no restriction.

3A/5: Porting and Polishing is **NOT** permitted **(No removal of any material)**

3A/6: Gaskets must be paper, or steel reinforced type commercially available, no copper, homemade or thinner gaskets allowed.

3A/7: Bearings must be of stainless-steel type, **NO** ceramic material permitted.

4. DRIVELINE

4/1: Rear wheel drive only

4/2: Locked differentials are NOT permitted.

4/3: Multi speed gearbox is NOT permitted.

4/4: Axle Extenders Permitted

5. FRONT AXLE

5/1: Standard as per manufacturer either e-clip or screwed in.

5/2: Axle Extenders Permitted

6. CHASSIS

6/1: Must resemble Standard 2 piece as per manufacturer (can be plastic, aluminium, or carbon fibre)

6/2: Stiffener plate can be fitted to front underside.

7. NERF AND CRASH BARS

7/1: Front crash bars are allowed as per body specifications i.e., RPM Front Bumper

7/2: Rear crash bars may be fitted but must stay inside the confines of the body.

8. BRAKES

8/1: Must be fitted and operational.

8/2: Only manufacturer's standard braking system allowed (disc mounted on hex hub of driveshaft) Upgraded pads and discs allowed.

8/3: Four-wheel braking system is not permitted.

9. SUSPENSION

9/1: Standard length as per manufacturer for 5B Front/Rear

9/2: Shock oil and springs not restricted.

9/3: Maximum of 4 shocks only

10. WHEELS AND TYRES

10/1: Baja Rear Tyres must be Beadlock or Glued Type, must be Commercially Available and made specifically for the Rear of a Baja 5B. Rims must be 24mm hex.

10/2: Baja Front Tyres must be Beadlock or Glued Type, must be Commercially Available and made specifically for the Front of a Baja 5B. Rims must be 24mm hex.

11. WINGS

11/1: Wings are NOT permitted but rear spoilers connected all the way along the rear of the body are permitted and must not protrude outside of body.

12. FUEL / TANK

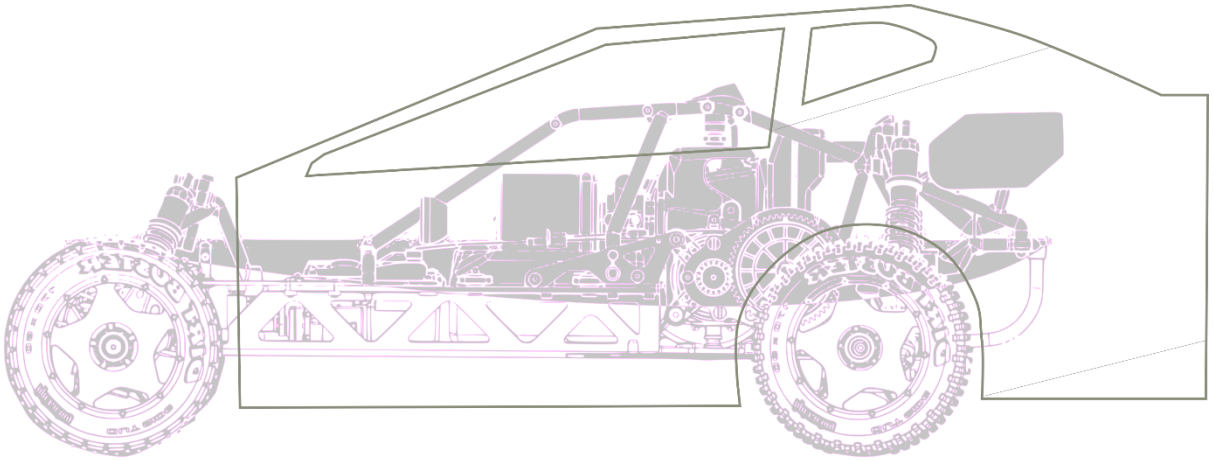
12/1: Fuel: Pump Unleaded / Premium unleaded with oil additive only, no other fuels or additives are allowed.

12/2: Tank: Must be mounted securely within vehicle.

12/3: Third Channel - Remote Kill Switch / Failsafe is mandatory and operational.

12/4: ONE only Transponder is to be fitted as near as possible behind front axle.

Figure 1.1 (Australian Dirt Modified Body)



- Image reflects rear of Australian V8 Dirt Modified
- Front of the body is open, providing body meets all rules No wing (s) *Refer to Wing Glossary of terms.*

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SPEEDCAR / MIDGET SPECIFICATIONS

1. GENERAL

1/1: Appearance must resemble full size speedway Midget / Speedcar, modern or vintage style.

1/2: Cars must be based on Smartech / Carson Style Chassis / River Hobby Crocodile / FG Marder / Hobby Pro Mutilator, Chassis only.

1/3: Alloy components that are or resemble commercially available are permitted.

2. MODEL DIMENSIONS

2/1: Maximum Overall length = 850mm

2/2: Maximum Body width = 250mm

2/3: Maximum Wheelbase as per manufacturer = 476mm

2/4: Maximum Width Front = 425mm

2/5: Maximum Width Rear = 450mm

2/6: Maximum Height from chassis 330mm

3. ENGINE

3/1: Maximum Engine Capacity 22.5cc (23cc) as supplied by manufacturer.

3/2: Zenoah G230RC / G240RC / and CY R230 / F230 engines are allowed.

3/3: Engine must remain standard as per manufacturer's specifications.

3/4: Non-Standard Air Filter can be fitted.

3/5: **INTAKE;** Carburettor from listed engines only WT-603(x), 668 (997), 771, 813 (998), 989 and 990 Bearing Modification on main shaft allowed. Genuine Walbro Spiral Diaphragms permitted. Inlet manifold may be changed maximum thickness including gaskets 31mm.

3/6: Exhaust must be standard CAN type Muffler as per engine manufacturer with no internal modifications, no power pipes. Changing exhaust outlet to side vent permitted, providing original vent is blocked.

3/7: Engine noise must not exceed 95dba measured from 10M from model using an approved measuring device.

3/8: Clutch must remain standard as fitted to listed engines 6k to 8k springs.

3/9: Aftermarket Pull Start permitted with catch fitted on Flywheel.

4. DRIVELINE

4/1: Differential must be standard, No locked or adjustable differentials.

4/2: Metal Gear upgrades are permitted.

4/3: Single Speed gearbox only gear ratios may be changed.

4/3A: Gear ratios: Open must be commercially available

SIDE GEARS: Open must be commercially available.

4/4: Clutch must remain standard as per manufacturer 6k to 8k spring permitted.

5. BRAKES

5/1: Brakes are to remain standard, no hydraulic or 4-wheel systems permitted.

6. SUSPENSION

6/1: Shock absorbers are open to all aftermarkets.

6/2: Mounting points for shocks may be moved on to chassis / cage.

6/3: Maximum of 4 shocks only

7. WHEELS AND TYRES

7/1: Tyre size max = 170mm diameter x 80mm wide

7/2: Only FG Square Hub to Baja 24mm Hex Adapters permitted.

7/3: All tyres to be commercially available.

8. FUEL / TANK

8/1: Fuel: Pump Unleaded / Premium Unleaded with oil additive only. No other fuels or additives are allowed.

8/2: Tank: Must be made of leak proof material and mounted securely within the vehicle

9. CRASH / NERF BARS / CAGE

9/1: Cage to be constructed of Maximum 10mm steel tubing.

9/2: Must have rear and side crash bars, side bars must not be wider than rear wheel width / front bar is optional. Wings are not permitted.

AMCA SPECIFICATIONS

1. GENERAL

1/1: Appearance style of body to resemble the AMCA speedway division.

1/2: Front and Rear crash bars may be fitted to vehicle.

2. MODEL DIMENSIONS

2/1: Maximum Overall Length: 800mm

2/2: Maximum Body Width: 380mm

2/3: Maximum Wheelbase as per manufacturer: 480mm

2/4: Maximum Width Front: 425mm

2/5: Maximum Width Rear: 450mm

2/6: Maximum Height from chassis: 270mm

3. RADIO / ELECTRICS

3/1: 2.4GHz band radio only

3/2: 'D' boxes/and or gyros are **NOT** allowed, includes any type of assistance e.g., AVC.

3/3: ONE only Transponder is to be fitted as near as possible behind front axle.

RCRA REMOTE CONTROL RACING AUSTRALIA

4. ENGINE

4/1: Maximum Engine Capacity 22.5cc (23cc) as supplied by manufacturer.

4/2: Zenoah G230 / G240 and CY R230 / F230 engines are permitted.

4/3: Standard two shoe clutch only 6k-8k rpm springs only

4/4: Exhaust Standard CAN style muffler as supplied by listed engine manufacturers. Engine noise must not exceed 95dba from 10M from model, using an approved measuring device.

4/5: Air filter is open; Intake manifold can be changed but must not exceed 31mm in length including gaskets.

4/6: **INTAKE;** Carburettor from listed engines only WT-603(x), 668, 989, (997), 771, 813 (998) and 990 Bearing Modification on main shaft allowed. Removal of Choke shaft allowed. Genuine Walbro Spiral Diaphragms permitted.

4/7: Aftermarket Pull Start permitted with catch fitted on Flywheel.

4/8: Clutch must remain standard as fitted to listed engines 6k to 8k springs.

5. DRIVELINE

5/1: Differential must be standard, No locked or adjustable differentials.

5/2: Metal Gear upgrades are permitted.

5/3: Single Speed gearbox only gear ratios may be changed.

5/3A: Gear ratios: Open must be commercially available.

SIDE GEARS: Open must be commercially available.

5/4: Clutch must remain standard as per manufacturer 6k to 8k spring permitted.

6. CHASSIS

6/1: Is to be based on Smartech / Carson / Duratek Traveller / River Hobby Crocodile / Hobby Pro Mutilator / FG Marder.

6/2: All Aluminium Billet parts are allowed.

6/3: Alloy steering arms and hubs can be fitted.

7. WHEELS AND TYRES

7/1: Wheels are to be Standard FG style square hub or hex wheels.

7/2: Tyre Size = 170mm x 70mm max (must be commercially available).

7/3: Wheel adapters are permitted.

RCRA REMOTE CONTROL RACING AUSTRALIA

8. SUSPENSION

8/1: Standard shock mounting points to be used.

8/2: Shock absorbers, springs, and shocks oil type open

8/3: Maximum of 4 shocks only

9. BRAKES

9/1: To remain standard no hydraulic or 4-wheel brakes allowed.

10. FUEL

10/1: Pump Unleaded or Premium unleaded and oil only. No fuel additives other than oil may be used.

LATE MODEL SPECIFICATIONS

1. GENERAL

1/1: Appearance must resemble full size Late Model Speedway Car

1/2: Must be based on Baja 5B Platform from the following Manufacturers HPI / Rovan Sport / King Motor

1/3: Body is mandatory see body specifications below.

1/4: Aluminium / carbon fibre / plastic / titanium upgrade to replace plastic parts and other stock parts permitted (must be commercially available)

1/5: All measurement for this model is measured from extreme points.

2. MODEL DIMENSIONS w/BODY FITTED

2/1: **MODEL LENGTH w/Body Fitted (OVERALL):** Maximum 1200mm.

2/2: **MODEL WIDTH FRONT:** Maximum 520mm

2/3: **MODEL WIDTH REAR:** Maximum 520mm

2/4: **BODY:** must be made from Plastic / Aluminium or Fiberglass

2/5: **BODY:** Maximum thickness of body panel material Plastic 3mm / Aluminium & Fiberglass 1.2mm

RCRA REMOTE CONTROL RACING AUSTRALIA

2/6: **BODY Nose Cone:** Must be a Wedge/Top Flared Side Nose Cone unique to a Late Model - Sides of Nose cone sits higher than guards.

2/7: **BODY WIDTH FRONT:** Maximum 610mm

2/8: **BODY WIDTH REAR:** Maximum 610mm

3. ENGINE

3/1: Minimum engine capacity 28.5cc (29cc) up to Maximum 31.8cc (32cc) as supplied by Zenoah, CY, KM or Rovan

3/2: Engine must remain internally stock, **NO** internal modifications allowed (No Ported heads or Scavenger plates allowed)

3/3: Air filter and exhaust may be changed (as per modifications outlined below)

3/4: Permitted engines are: Zenoah G320RC / Rovan 32cc or Standard Engines up to 31.8cc

3/5: Reed valve engines are **NOT** permitted.

3/6: Ignition system must remain standard as per engine manufacturer including spark plug lead, mechanically fixed timing coil only.

3/7: Flywheel must remain standard.

3/8: Clutch must remain standard as fitted to listed engines 5k to 8k springs.

3/9: Aftermarket Pull Start permitted with catch fitted on Flywheel.

3A. ENGINE MODIFICATIONS

3A/1: EXHAUST: Non-standard is permitted and must not be longer than the body, must be contained within the body. Side pipes permitted. Engine Noise must not exceed 95Dba from 10M from the model. Using an approved measuring device.

3A/2: **INTAKE;** Carburettor from listed engines only WALBRO WT-603(x), 668 (997), 989, 771, 813, (998), 990, 721 or 1107. Bearing Modification on main shaft allowed. Removal of Choke shaft allowed. Genuine Walbro Spiral Diaphragms permitted.

3A/3: Non-standard Intake manifold / Air filter is allowed. Maximum length of insulator blocks 35mm including gaskets.

3A/4: Spark plug may be changed no restriction.

3A/5: Porting and Polishing is **NOT** permitted **(No removal of any material)**

3A/6: Gaskets must be paper, or steel reinforced type commercially available, no copper, homemade or thinner gaskets allowed.

3A/7: Bearings must be of stainless-steel type, **NO** ceramic material permitted.

4. DRIVELINE

4/1: Rear wheel drive only

4/2: Locked differentials are NOT permitted.

4/3: Multi speed gearbox is NOT permitted.

4/4: Axle Extenders permitted.

5. FRONT AXLE

5/1: Standard as per manufacturer either e-clip or screwed in.

5/2: Extenders Permitted

6. CHASSIS

6/1: Must resemble Standard 2 piece as per manufacturer (can be plastic, aluminium, or carbon fibre)

6/2: Stiffener plate can be fitted to front underside.

7. NERF AND CRASH BARS

7/1: Front bumper permitted under nose cone of body.

7/2: Rear crash bars may be fitted but must stay inside the confines of the body.

8. BRAKES

8/1: Must be fitted and operational.

8/2: Only manufacturer's standard braking system allowed (disc mounted on hex hub of driveshaft) Upgraded pads and discs allowed.

8/3: Four-wheel braking system is not permitted.

9. SUSPENSION

9/1: Standard length as per manufacturer for 5B Front/Rear

9/2: Shock oil and springs not restricted.

9/3: Maximum of 4 shocks only

10. WHEELS AND TYRES

10/1: Baja Rear Tyres must be Beadlock or Glued Type, must be Commercially Available and made specifically for the Rear of a Baja 5B. Rims must be 24mm hex.

10/2: Baja Front Tyres must be Beadlock or Glued Type, must be Commercially Available and made specifically for the Front of a Baja 5B. Rims must be 24mm hex.

10/3: Rear wheels and tyres are permitted to be used on the front.

11. WINGS

11/1: Wings are not allowed but rear spoilers fixed and connected all the way along the rear of the body are permitted and must not protrude outside of body.

12. FUEL / TANK

12/1: Fuel: Pump Unleaded / Premium unleaded with oil additive only, no other fuels or additives are allowed; tank must be mounted securely in vehicle.

WINGLESS SPECIFICATIONS

1. GENERAL

1/1: Appearance must resemble a full-size Wingless Sprint Speedway Car and may be of a modern or classic style.

1/2: Must be based on Baja 5B Platform from the following Manufacturers HPI / Rovan Sport / King Motor.

1/3: Frame/Cage: Roll cage to be constructed of maximum 3/8" or 10mm steel tubing.

1/4: Aluminium / carbon fibre / plastic / titanium upgrade to replace plastic parts and other stock parts permitted (must be commercially available)

1/5: All measurement for this model is measured from extreme points.

1/6: Wings are **NOT** permitted.

2. MODEL DIMENSIONS

2/1: **MODEL LENGTH:** Maximum overall 990mm

2/2: **MODEL WIDTH FRONT:** Maximum 490mm

2/3: **MODEL WIDTH REAR:** Maximum 520mm

2/4: **MODEL HEIGHT:** Maximum 320mm measured from base of chassis.

2/5: **BODY PANELS:** Must be made from Plastic, Aluminium or Fibreglass.

3. ENGINE

3/1: Maximum engine capacity (28.5cc) 29cc as supplied by engine manufacturer.

3/2: Engine must remain internally stock, **NO** internal modifications allowed.

3/3: Permitted engines are Zenoah G230RC/G240RC/G260RC/G270RC/G290RC, CY R230/F230/R260/F260/F270/F290, or equivalent Fuelie, Rovan or King Motor

3/4: Reed valve engines are **NOT** permitted.

3/5: Ignition system must remain standard as per engine manufacturer including spark plug lead, mechanically fixed timing coil only.

3/6: Flywheel must remain standard.

3/7: Clutch must remain standard as fitted to listed engines 6k to 8k springs.

3/8: Aftermarket Pull Start permitted with catch fitted on Flywheel.

3A. ENGINE MODIFICATIONS

3A/1: **EXHAUST** must be standard CAN type muffler as per engine manufacturer with no internal modifications, no power pipes. Changing exhaust outlet to side vent permitted, providing original vent is blocked.

3A/2: **INTAKE;** Carburettor from listed engines only WT-603(x), 668(x), 989, (997), 721, 771, 813 (998) and 990 Bearing Modification on main shaft allowed. Removal of Choke shaft allowed. Genuine Walbro Spiral Diaphragms permitted.

3A/3: Non-standard Intake manifold / Air filter is allowed. Maximum length of insulator blocks 31mm including gaskets.

3A/4: Spark plug may be changed no restriction.

3A/5: Porting and Polishing is **NOT** permitted **(No removal of any material)**

3A/6: Gaskets must be paper, or steel reinforced type commercially available, no copper, homemade or thinner gaskets allowed.

3A/7: Bearings must be of stainless-steel type, **NO** ceramic material permitted.

4. DRIVELINE

4/1: Rear wheel drive only

4/2: Locked differentials are NOT permitted.

4/3: Multi speed gearbox is NOT permitted.

4/4: Axle Extenders permitted.

5. FRONT AXLE

5/1: Front hubs can be either e-clip or screwed in clip less type.

5/2: Axle Extenders permitted.

6. CHASSIS

6/1: Standard 2 piece as per manufacturer (can be plastic, aluminium, or carbon fibre)

6/2: Stiffener plate may be fitted to front underside.

7. NERF AND CRASH BARS

7/1: Cars must have front, rear and both side crash bars fitted.

7/2: Plastic style front bars/bumpers are also permitted e.g., RPM.

7/3: To be constructed of maximum 10mm diameter aluminium or steel (steel greater than 6mm in diameter must be in tube only)

8. BRAKES

8/1: Must be fitted and operational.

8/2: Only manufacturer's standard braking system allowed (disc mounted on hex hub of driveshaft) Upgraded pads and discs allowed.

8/3: Four-wheel braking system is NOT permitted.

9. SUSPENSION

9/1: Standard length as per manufacturer for 5B Front/Rear

9/2: Shock oil and springs not restricted.

9/3: Mounting points for shocks may be moved on to chassis / cage.

9/4: Maximum of 4 shocks only

10. WHEELS AND TYRES

RCRA REMOTE CONTROL RACING AUSTRALIA

10/1: Baja Rear Tyres must be Beadlock or Glued Type, must be Commercially Available and made specifically for the Rear of a Baja 5B. Rims must be 24mm hex.

10/2: Baja Front Tyres must be Beadlock or Glued Type, must be Commercially Available and made specifically for the Front of a Baja 5B. Rims must be 24mm hex.

11. FUEL / TANK

11/1: Fuel: Pump Unleaded / Premium unleaded with oil additive only, no other fuels or additives are allowed.

11/2: Tank: Must be mounted securely within vehicle.