2025 EP OFF-ROAD RULES

CONTENTS

ELECTRIC GENERAL RULES

B1. GENERAL 2
B2. DRIVING 2
B3. RACE PROCEDURES 3
B4. RAIN AFFECTED MEETINGS 4
B5. TRACK RULES 4

OFF ROAD GENERAL TECHNICAL RULES

B6. RACE DURATION 5
B7. STOCK CLASS MOTOR SPECIFICATIONS 5
B8. LIMITED BRUSHLESS CLASSES MOTOR SPECIFICATIONS 5
B9. MODIFIED CLASS MOTOR SPECIFICATIONS 5
B10. 4WD SHORT COURSE TRUCK MOTOR SPECIFICATIONS 7
B11. 1/8 SCALE MOTOR SPECIFICATIONS 7
B12. BODY 7
B13. BATTERIES 8

OFFROAD EP RACE CLASSES

B14. 1/10th BUGGY GENERAL RULES 8
B15. TYRES 9
B16. 2WD BUGGY 9
B17. 4WD BUGGY 9
B18. 1/10th TRUCK GENERAL RULES 9
B19. 2WD TRUCK 10
B20. SHORT COURSE TRUCK GENERAL RULES 10
B21. 2WD SHORT COURSE TRUCK 10
B22. 4WD SHORT COURSE TRUCK 11
B23. 1/8th SCALE CLASSES GENERAL RULES 12
B24. 1/8th ELECTRIC BUGGY 12
B25. 1/8th ELECTRIC TRUGGY 13

ELECTRIC GENERAL RULES

B1 GENERAL

B1.1 All cars must be electrically powered.

B1.2 It is the driver's responsibility to ensure that their car complies with the rules contained within this rulebook irrespective of initial scrutineering at a meeting.

B1.3 All rules must be strictly adhered to. Violation of the technical rules in a particular class will result in disqualification from that race. Deliberate violation of NZRCA technical rules will result in disqualification from the meeting.

B1.4 Body shells must be neatly finished and painted when initially entered in a meeting.

B1.5 No car can be raced without a body shell being securely fitted at all times.

B1.6 In the event of breakage to a car during a meeting, that car may be substituted with another car of the exact same Manufacturers Technical Specifications. The driver must first apply to the Race Director (or his designate) of the meeting.

B1.7 A driver may enter any and as many classes as they wish at a national meeting.

B1.8 Only one drive motor may be used.

B1.9 Batteries may not be changed during a race.

B1.10 Tyre additives are prohibited in all racing classes as per rule G10.2

B1.11 At all national meetings a certified test weight should be available to ensure that the scrutineering scales are accurate. This weight should be no less than 1000 grams or more than 1700 grams.

B1.12 That decisions made by the Electric Off-Road Technical Officer about Off-Road Technical issues be considered final and when conveyed to the meeting organisers, either orally or in writing, they shall override decisions made by either meeting organisers, Scrutineers or Race Directors.

B2 DRIVING

B2.1 No car will have the ability to reverse.

B2.2 No car will be driven in the reverse direction of the track.

B2.3 If a car is removed from the track for any reason it must be returned at the same position as it left. The car must be removed and replaced - only by a marshal.

B2.4 Drivers may leave the stand during a race but if they leave the stand they may not be permitted to re-take the stand and will only have those laps counted before they stepped off the stand.

B2.5 The car must be on the grid and driver on the stand 30 seconds before the start of the race, otherwise the driver is deemed to be a late starter and must start from the pit lane or other area designated by the Race Organisers. The late starting car must not gain any advantage from starting out of pit lane, with this in mind it must not exit the pit lane until all remaining running cars (i.e. not stalled, broker or off the track) have passed the pit exit for their first time. If there is more than one car starting from pit lane at the same time, then they must exist the pits in the order they qualified.

B2.6 A heat or race that has to be re-run will be rescheduled to be re-run at the earliest possible time, Race Director will get a majority vote from the races in that heat or race when it will be restarted.

B3 RACE PROCEDURES

B3.1 An audible signal or warning is to be given at 30 seconds before start, 10 seconds before the start, then an audible countdown for the last 10 seconds before the starting horn which is to be of a different tone to previous warning signals. During staggered start qualifying races, individual drivers are to be called to start after the starting horn is sounded. At the completion of the race time another audible signal is to be given signifying that drivers are to complete the lap they are on. The last audible signal is to be given once all drivers have finished the race. This is to be the standard at national events.

B3.2 There will be no restart due to a jump-start. If start is jumped a penalty of a stop and go will be given.

B3.3 The race result is to be calculated by the amount of laps completed in the race stated time plus 1 lap, with the number of seconds taken to complete the lap after the race stated time, with an appropriate time (approximately 1.5 times) a host clubs average lap time.

B3.4 Failure to complete the last lap after the heat or final time is completed shall mean the result will be the number of laps and time at which the car completed the previous lap (e.g. in a 5 min race the previous completed lap might have been at 4:43)

B3.5 Qualifying will be done via a staggered start system. Each driver will have a staggered start and be on an individual clock for the race period. The race director or computer lap scoring programme will determine the starting order and timing between staggering of drivers. Qualifying results to be determined using IFMAR qualifying points system

B3.6 Finals Procedures for national events will be a grid start, where all cars will start simultaneously.

B3.7 Final starting positions are based on the *results from qualifying,* with the fastest/highest qualifier on Grid 1 decending in qualifying order to the maximum number of racers in that heat. The grid order is fixed for the remainder of the meeting regardless of race results.

B3.7.1 Lower finals are subject to the same rule with the highest placed qualifier outside of the maximum grid for the previous heat to start on Grid 1.

B3.8 Grids must be a minimum of 1.5 metres (1.0m for Indoor national meetings) from front each car to the front the next car, measured in a parallel line to the track centre line. Arrangement of the grid is up to the Race Director in consultation with event organiser's.

B3.9 Heats and finals will consist of a maximum of 12 cars.

B3.10 There will be a minimum of 3 qualifying heats for each class.

B3.11 All A Finals will be run over a minimum 3 races and points awarded for each result based on placings.

B3.11.1 Subsequent finals are at the discretion of the organising club. The organiser shall endeavor to give all finalists 3 races.

B3.11.2 The race director, in the case of force majeure shall have the power to reduce or remove the number of lower finals.

B3.12 Final positions will be decided by a point system based on one (1) point for the winner of each final on down to twelve (12) points for the twelth placed finisher in each separate final. The best two (2) of three (3) finishes will count. In the event of a tied position, the driver with the single best finishing position in either of the best two (2) finals that counted, will be awarded the tie, in the event of a continuing tie, then the laps and times from the best finishing position will be

compared and the one with the fastest laps and time total will be awarded the tie. If still continuing, then times from the second best position will be compared.

B4 RAIN AFFECTED MEETINGS

B4.1 For national meetings, in the event of bad weather clubs should take all necessary steps to be able to move the event indoors. If there is no indoor venue available it must be started on the entry form. The decision to move to the indoor venue or abandon the meeting if none is available is to be made by the Race Director and his/her decision is to be final.

B4.2 Any decision made to move the meeting to an indoor venue or abandon the meeting at national events must only be made after the Race Director has consulted with a panel of drivers made up of one representative of each NZRCA member club present.

B4.3 Any decision made to move the meeting to an indoor venue or to abandon the meeting at National Championships must only be made after the Race Director in conjunction with those members of the NZRCA Executive present has consulted with a panel of drivers made up of one representative of each NZRCA member club present.

B4.4 If the meeting is abandoned the following shall apply:

i) If the racing is abandoned on qualifying day, qualifying position for each driver is to be determined as follows:
   a. If no full rounds of qualifying have been completed, then qualifying is to be moved to finals day.
   b. If only one full round of qualifying has been completed, then the result of the completed round is to be used.
   c. If at two full rounds of qualifying have been completed, the best single time is to be used.

ii) If the meeting is abandoned on finals day, before all rounds of finals are complete, the final positions for each driver are to be determined as follows:
   a. If no qualifying rounds have been completed, then the meeting is to be abandoned and no result can be declared.
   b. If no full rounds of finals have been completed, then qualifying positions are to be used.
   c. If one full round of finals has been completed, then the points from that completed round are to be used.
   d. If two full rounds of finals have been completed, then the best single points from the two completed rounds is to be used.

B4.5 If weather conditions dictate that the primary venue is abandoned in favour of completing the meeting indoors then a minimum of 1 hour controlled practice time shall be provided at the indoor venue immediately prior to the continuation of the meeting.

B5 TRACK RULES

B5.1 Corner cutting is to be discouraged by placing markers and barriers.

B5.2 Start, Stop/Go areas and Finish Lines must be clearly marked.

B5.3 All tracks (excluding indoor) MUST be a minimum of 2.5 meters wide, with the Start straight a minimum of 3 meters wide.

B5.4 Indoor tracks MUST be a minimum of 2.4 meters wide including start straight.

B5.5 The track should be laid out so there are no hidden areas when viewed from the driver's stand.

B5.6 Adequate protection should be provided for spectators.

B5.7 Guideline: - Before granting a National event, the NZRCA should ensure that the proposed track has adequate drainage and appropriate surface so that it can be used within two hours of rain stopping.

OFF ROAD GENERAL TECHNICAL RULES

B6 RACE DURATION

B6.1 All races will be of the time duration specified for each class as listed below, plus the time to finish the last lap. Where a range is given, the duration used is to be at the race organiser's discretion, but must be declared at time of entries:

a. 1/10th scale classes heats and finals – Five minutes.
b. 1/8th scale classes heats – Between six and ten minutes.
c. 1/8th scale classes finals – Between six and ten minutes.

B7 STOCK CLASS MOTOR SPECIFICATIONS

B7.1 BRUSHED MOTORS: Only permitted motors are unopened, unmodified Johnson 540s or Mabuchi 540s closed can, sealed end bell, bushed, with non-replaceable brushes and bushes.

B7.2 BRUSHLESS MOTORS: 540 size (36mm dia x 50mm length) 17.5 turn brushless motors (sensored or unsensored), brand and type are to be ROAR, EFRA or IFMAR approved.

a. Type and brand of ESC used with these is also open, but must be either 'Stock Spec' (have no boost/turbo or timing advance programming) or be running in 'blinky' mode, with no softening or smoothing functions activated.
b. It is the responsibility of the competitor to prove that their motor has the correct number of winds to comply with this rule.

B8 LIMITED BRUSHLESS CLASSES MOTOR SPECIFICATIONS

B8.1 Motors for 2wd Short Course Truck as follows:

a. Brushed 550: Minimum wind – 12 turn.
b. Brushed 540: Minimum wind – 15 turn.
c. Brushless 540: Minimum wind – 10.5 turn.

B8.2 Motors for Indoor Off-Road Modified Classes as follows:

a. Brushless 540: Minimum wind – 2wd Classes - 10.5 turn (Blinky ESC)
b. Brushless 540: Minimum wind – 4wd Classes - 8.5 turn (Blinky ESC)

B9 MODIFIED CLASS MOTOR SPECIFICATIONS

B9.1 Brushed or brushless 540 size motors may be used as described below.

B9.2 BRUSHLESS MOTORS:

B9.2.1 Sensored or sensorless motors are allowed.

B9.2.2 The motor has to be rebuildable. Ball bearings are allowed.

B9.2.3 The power connector has to be clearly marked A, B, C. A for phase A, B for phase B, C for phase C.

B9.2.4 `05` size specifications

B9.2.4.1 Can:

a. Overall maximum diameter is 36.02mm measured at whatever point yields the maximum dimension, excluding solder tabs or lead wires.
b. Overall minimum diameter is 34.00mm measured at whatever point yields the minimum dimension, excluding solder tabs or lead wires.
c. Maximum length is 53.00mm measured from the mounting face of the motor to the furthest most point of the end bell, not including solder tabs, lead wires or original manufacturer's logo or name.
d. Minimum length is 50.00mm measured from the mounting face of the motor to the furthest most point of the end bell, not including solder tabs, lead wires or original manufacturer's logo or name. Motor mounting holes must be on 1.00- inch (25.40mm) centres.

B9.2.4.2 Stack/Stator:

a. The Stack or Backiron must be continuous. The laminations have to be one after the other without anything in between.
b. Stack/Backiron minimum length 19.30mm, maximum 21.00mm.
c. The thickness of the Stack/Backiron laminations is 0.35+/-0.05 mm.
d. All laminations must be of the same material. Inside diameter of Stack or Windings equals the central space between the laminations or assembly of windings and must accept 'plug' gauges of 12.5 mm minimum, 16.0 mm maximum. These dimensions to be measured with the centre of the 'plug' gauge in-line with the centre of the motor Can. (i.e. Concentric to can).

B9.2.4.3 Winding:

a. Delta and Y wound stators are permitted. Only circular (round) pure copper wire permitted. No turn limit (Indoor limit as per rule B8.2 apply).

B9.2.4.4 Rotor:

a. Shaft diameter must be 0.125 inches (3.175mm).
b. Only one piece, two pole Neodymium or Ferrite magnetic rotors are permitted.
c. Magnet minimum length 23.00mm, maximum 27.00mm.
d. Magnet minimum diameter 12.00mm, maximum 15.50mm.

B9.2.5 Any commercially available brushless motor that conforms to specific size measurements may be used. No hybrid (mixing of parts from approved brushless motors) allowed.

B9.3 BRUSHED MOTORS:

B9.3.1 Overall maximum diameter is 36.02mm measured at whatever point yields the
maximum dimension. Maximum length is 53mm measured from the mounting face of the motor to the furthest most point of the end bell, not including solder tabs or lead wires. Shaft diameter must be .125". Motor mounting holes must be on 1.00"centres.

B9.3.2 Only ceramic magnets are permitted, cobalt and rare earth magnets are

specifically prohibited.

B9.3.3 Motors must have replaceable brushes.

B9.3.4 Maximum stack length is 22.6mm. Maximum stack diameter 23.2mm. Only three pole armatures are permitted. All motors must have manufacturer's logo or name on the end bell.

B9.3.5 The end-bell may be advanced no more than 24 degrees.

B10 4WD SHORT COURSE TRUCK MOTOR SPECIFICATIONS

B10.1 Trucks must be powered by a single 540 brushed or brushless motor(as per rule B9) or 10th scale 4×4 Short Course Truck (SCT) 550 brushless motor as per the following:

B10.1.1 Can: Maximum overall length is 73.0mm measured from the mounting face of the motor to the furthest most point on the endbell, not including solder tabs, lead wires,sensor plug or housing, or the manufacture's logo or name.Motor mounting holes must be on 1.00 inch (25.40mm) centers.Diameter is 36.0mm.

B10.1.2 Stator: Motor stator minimum length is 35mm (+/- 0.15mm) with maximum length of 42mm and the outside diameter is 36mm.The thickness of the laminations shall be 0.35mm.A 'go-no-go' gauge 14.500 +0.000/-0.005mm diameter shall pass into the stator, clearing the stator plus its windings and the electrical collection ring at the end of the stator.

B10.1.3 Rotor: External shaft diameter may be either 0.125 inches (3.175mm) or 0.197 inches (5mm).Only one piece, two pole Neodymium sintered, or Ferrite (Ceramic) magnetic rotors are permitted. The magnet length shall be a minimum of 39.0mm and maximum of 46.0mm not including any nonmagnetic balancing material. The magnet outside diameter shall have a minimum of 12.3mm and a maximum of 14.0mm, no tolerance, for the entire length of the magnet.

B10.2 Motor wind limits: None

B11 1/8 SCALE MOTOR SPECIFICATIONS

B11.1 Motors for 1/8th Off-road classes are to be any commercially available brushless motor intended for use in 1/8th scale racing applications.

B11.2 Motor wind/KV limits: None

B12 BODY

B12.1 Cars entered for off-road competitions should be reasonable representations of the style of full size cars generally accepted as being suitable for rally-cross, rallying or desert racing.

B12.2 Open roll cage style cars will only be permitted to compete if an entrant can supply proof that the car is closely based on a full size example.

B12.3 A driver's figure, consisting of at least a human driver's head, arms and shoulders shall be mounted in an appropriate position in all open cockpit cars.The figure shall wear a helmet and be painted in a realistic appearance, colour and garb.

B12.4 No car may be constructed to be dangerous or cause damage to other competitors' cars.

B12.5 If a gear cover is provided in the car kit, it must be fitted on the car so that no rotating gears (eg Spur gears) are exposed.This is to prevent injuries.

B12.6 A front bumper may be fitted as long as it complies with the following:

a. It must be constructed from a resilient material, such as rubber or plastic and fitted in such a way as to minimise injury on impact.
b. It will have a minimum thickness of 2.5mm and the edges must be rounded.
c. It must be a separate item, bolted or screwed to the front of the car.
d. Bumpers made of hard, non-resilient material, such as metal, brittle plastic, plywood, Masonite, etc will not be allowed.

B12.7 The body entered for Concours judging must be the body shell used for at least one race during the meeting.

B13 BATTERIES

B13.1 Batteries for all classes are to be as follows:
a. Sub-C sized NiCad / NiMH batteries, or;
b. Lithium polymer (Lipo) or LiFe batteries.
There is no capacity limit in any class.

B13.2 For Nicad/NiMH, cars will be driven by a maximum of the following:
a. 1/10th scale classes: 6 cells with a nominal voltage of 1.2 volts per cell – 7.2- volt total.
b. 1/8th scale class: 12 cells with a nominal voltage of 1.2 volts per cell – 14.4 volt total.

B13.3 The use of Lipo/LiFe batteries is to be as per NZRCA General Rules G17

OFFROAD EP RACE CLASSES

B14 1/10th BUGGY GENERAL RULES

B14.1 Any type of speed controller may be used, but it must be contained within the car and not protrude through the body shell. For indoor national meetings, speed controllers must be either 'Stock Spec' (have no boost/turbo or timing advance programming) or be running in 'blinky' mode.

B14.2 Cars can be modified in any way within the Technical Specifications.

B14.3 No metal or hard plastic material is allowed to be used for spikes.

B14.4 Body must be of an offroad buggy type only. Body must cover all chassis, drivetrain, and electrical components between the front and rear shock towers when viewed from above. The excluding slipper clutch spring/adjuster nuts, on vehicles where they are intended to protrude through the body

B14.5 Dimensional requirements for 1/10th Buggy classes:

Overall Dimensions & Weight	**Minimum**	**Maximum**
Overall Height *(with Suspension fully compressed)*		200mm
Overall Length		460mm
Overall Width *(vehicle must be able to roll out of the measurement box under its own momentum when the box is tilted to approximately 30deg angle.)*		255mm
Weight 2wd Cars *(including transponder)*	1474g	
Weight 4wd Cars *(including transponder)*	1588g	
Rear Wing Width *(across car)*		220mm
Rear Wing Length		80mm
Rear Wing Side Dam Length		80mm
Wheel & Tyre Diameter		90mm

B15 Tyres

B15.1 For all NZRCA National Events, one control tyre per 1/10th Scale Class is to be nominated by the host club. Tyres for 1/8th Scale Classes shall be open

B15.2 No restriction on rims. Tyre compound is to be nominated by the host club.

B15.3 Inserts are to be as supplied with tyres ***or*** nominated by the host club

B15.4 Drivers are to supply own tyres and it is the drivers responsibility to prove their tyres comply with the nominated tyres at scrutineering.

B15.5 Host Club to nominate each class tyre when they apply to host the event or must provide all nominated tyres at the soonest possible date prior to entries being opened to the event.

B15.6 Control tyres are to be in near new condition with no tampering or alterations allowed. This will be at the race director's discretion

B15.7 The use of any oil or petroleum based compound for the purpose of treating the tyre is prohibited. Only regularly available detergent based cleaners and water can be used to clean the tyres. The use of solvents to clean the tyre bead before glue application is permitted.

B16 2WD BUGGY

B16.1 Cars must have no more than 2 driven wheels.

B16.2 Motors are to be as follows:

a. Stock class – Motors to be as per Rule B7.
b. Modified class – Motors to be as per Rule B8 & B9.

B17 4WD BUGGY

B17.1 All cars must be four wheel drive at the start of a race with the exception of 2WD Front Wheel Drive cars, which must have only the two Front Wheels driving a the start of a race.

B17.2 Motors are to be as follows:

a. Stock class – Motors to be as per Rule B7.
b. Modified class – Motors to be as per Rule B8 & B9.

B18 1/10th TRUCK GENERAL RULES

B18.1 Vehicles must have a commercially available chassis originally designed for use as a truck.

B18.2 There are no limitations on steering.

B18.3 There are no limitations on suspension.

B18.4 Bearings are allowed.

B18.5 There are no limitations on gears.

B18.6 Truck Class vehicles must run with large Truck type class tyres and rims all round.

B18.7 Bodies to be of a pickup truck type only. (no "truggy" style bodies). Bodies are to cover the front and rear shock towers.

B18.8 Stadium truck wings are to be single element stadium truck style wings only. Wings are to be mounted directly to the body shell, with a maximum spoiler chord of 50mm. Buggy/Truggy style wings are now allowed.

B18.9 Dimensional requirements for 1/10th Truck classes:

Overall Dimensions & Weight	**Minimum**	**Maximum**
Overall Length		500mm
Overall Width *(vehicle must be able to roll out of the measurement box under its own momentum when the box is tilted to approximately 30deg angle.)*		335mm

Weight (including transponder)	1700g	
Rear Wing Width		No wider than body width of the truck
Rear Wing Height		35mm above roof height

B19 2WD TRUCK

B19.1 Trucks must have no more than 2 driven wheels.

B19.2 Motors are to be as follows:

a. Stock class – Motors to be as per Rule B7.
b. Modified class – Motors to be as per Rule B8 & B9.

B20 SHORT COURSE TRUCK GENERAL RULES

B20.1 Any transmitter, steering servo or ESC may be used.

B20.2 Any type of heatsink or cooling fan may be used.

B20.3 Batteries to be as per Rule B13.

B20.4 BODY: The body must resemble that of a typical full size Short Course truck. I.e. it must be based on a full-fendered Ute or Pickup truck with a two door cab and lower rear deck or roll cage. In addition:

a. The bonnet must include a front grill and headlights (or headlight covers).
b. The body's wheel arches must fully cover all four wheels when viewed directly from above.

B20.5 Small Spoilers/fins/number plates that come from the 'body shell being used', running the length-wise direction of the body, are permitted.

B20.6 Any spoiler/Flap/wings, running in a direction across the width of the body shell are NOT allowed. This includes any Spoiler/Flap/Wings that are 'added on' OR cut and folded from the body shell itself.

B20.7 Dimensional requirements for Short Course Truck wheels & tyres:

Overall Dimensions & Weight	**Minimum**	**Maximum**
Inner Wheel Bead Diameter	55.88mm (2.2")	76.20mm (3.0")
Outer Wheel Bead Diameter	55.88mm (2.2")	55.88mm (3.0")
Wheel Width	40mm	40mm (1.65")
Tyre Diameter (when mounted)		106mm (4.2")
Tyre Width (when mounted)		47mm (1.85")

B20.8 TYRES:

a. No 1/8th scale tyres or rims allowed.
b. Any type of foam tyre-insert is allowed.

B21 2WD SHORT COURSE TRUCK

B21.1 Class open to 1/10th scale, rear-wheel drive, Short Course style trucks only.

B21.2 CHASSIS:

a. The original factory chassis plate may be replaced with an after-market chassis plate intended for use on that model truck. The truck's original factory overall dimensions must be maintained.
b. Short Course style front and rear bumpers must be used.
c. Side nerf bars are optional and must be fully under and covered by the body.

B21.3 Drive train must be rear wheel, two-wheel drive only. Exposed gearing must be covered.

B21.4 Any replacement or upgrade parts are allowed, from either the original manufacturer or third parties. Any such parts must be designed to replace an original part. No 1/8th scale parts such as big-bore shock absorbers are allowed.

B21.5 No additional parts are allowed with the exception of chassis covers and/or under-trays.

B21.6 BODY: In addition to the general body rules:

a. Body Venting: - Body venting is open to any original vent cut lines in the body.
b. No added wings or spoilers are permitted.

B21.7 TYRES: In addition to the general tyre rules:

a. No tyre tread cutting or custom-cut tyres allowed.
b. No low profile tyres allowed.

B21.8 Only motors as per Rule B8 may be used.

B21.9 Traxxas 7Cell NiMh Batteries may be used with a Traxxas SCT (Slash 2wd or Raptor) as long as they are used with the kit XL-5 ESC (part #3018R) and 12T Titan Brushed motor (Part Number #3785)

B21.10 Dimensional requirements for 2wd Short Course Truck class:

Overall Dimensions & Weight	**Minimum**	**Maximum**
Wheelbase	320mm	340mm
Overall Width *(including body) (vehicle must be able to roll out of the measurement box under its own momentum when the box is tilted to approximately 30deg angle.)*	280mm	305mm
Overall Length *(including body)*	540mm	580mm
Weight *(with battery & transponder)*	2100g	

B22 4WD SHORT COURSE TRUCK

B22.1 Class open to 1/10th scale, four-wheel drive, Short Course style trucks only. Trucks converted from 1/8th scale chassis are not allowed.

B22.2 Drivetrain must be 4WD.Exposed gearing must be covered.

B22.3 Replacement parts: Any replacement or upgrade parts are allowed, from either the original manufacturer or third parties. No 1/8th scale parts allowed.

B22.4 BODY: In addition to the general body rules:

a. Body Venting: - Body venting is open to any original vent cut lines in the body.
b. No added wings or spoilers are permitted.

B22.5 Short Course style front and rear bumpers must be used.

B22.6 Dimensional requirements for 4wd Short Course Truck class:

Overall Dimensions & Weight	**Minimum**	**Maximum**
Wheelbase	320mm	340mm
Overall Width *(including body) (vehicle must be able to roll out of the measurement box under its own momentum when the box is tilted to approximately 30deg angle.)*	280mm	305mm
Overall Length *(including body)*	540mm	580mm
Weight *(with battery & transponder)*	2500g	

B22.7 Only motors as per Rule B10 may be used.

B23 1/8th SCALE CLASSES GENERAL RULES

B23.1 TYRES:

a. All tyres must be black with the exception of side wall lettering.

b. No spikes, tubes or additional items intended to increase traction may be either glued to the outside of tyres or passed through tyres from the inside.
c. Any combination of commercially available 1/8th scale - wheels and tyres may be used.
d. Modifications to tyre patterns are allowed.

B23.2 Transmission and drive: Single speed transmissions only.4WD.

B23.3 Suspension: Independent.

B23.4 Front or rear bumpers must be made of a solid material and with rounded edges, they may not extend to the side beyond the outer edge of the tyres unless O.E.M (Original Equipment Manufacturer/or factory).

B23.5 DIMENSIONS: When checking dimensions as specified in class rules:

a. The car shall be measured for width by placing it on a flat base material equipped with two side rails of 250mm height. These shall be spaced apart by a distance equal to the maximum allowable width and constructed in such a way that the car can roll freely between them. The base material must be constructed of high quality components suitably stiffened to prevent distortion. The car must roll freely between the side rails with any steerable wheels set in the straight ahead position irrespective of the compression, extension or roll angle of the suspension.
b. The car shall be measured for length and height in a similarly constructed box of internal dimensions equal to the maximum length, which includes provision for checking the maximum height.
c. The measurement of the wheelbase may be made by simple measure of axle centre distances with the suspension in any position. The Race Director should be prepared to make more exact checks in cases of doubt or protest. It is then suggested that the wheels are removed and the wheel spindles are firmly placed on V blocks whilst accurate measurements are made.
d. The wheel diameter measurement will be taken from the diameter at the mounting point where the tyre bead is attached to the wheel/rim. The maximum wheel diameter does not include the moulded in ridges of wheels that keep the tyre in place.
e. If a car is found to exceed the limits of dimensions on checking immediately after a race, positive proof of race damage may prevent disqualification.

B23.6 Only motors as per Rule B11 may be used.

B24 1/8th ELECTRIC BUGGY

B24.1 Dimensional requirements for 1/8th Electric Buggy class:

Overall Dimensions & Weight	**Minimum**	**Maximum**
Wheelbase	270mm	330mm
Overall Width *(including body) (vehicle must be able to roll out of the measurement box under its own momentum when the box is tilted to approximately 30deg angle.)*		310mm
Overall Length		730mm
Overall Height *(overall without aerial – measure with suspension fully compressed)*		250mm
Weight *(with battery and transponder)*	3200g	
Wing Overall Width		217mm
Wing Length		85mm

B24.2 BODY: Cars shall be a reasonable representation of the style of car used for Off-Road, Desert or Trial racing. In addition:

a. Full body shells of saloon style are permitted but may only be trimmed to expose a maximum of 50% of the tyres at full suspension depression.
b. Where a roll-cage is fitted an open wheel style body shell must be fitted underneath the cage so designed as to enclose R/C equipment with sufficient front and side areas to allow clear display of racing numbers.
c. Openings may be cut in the shell to allow for cooling of motor or ESC as long as such cut-outs are included within the manufacturer's original cut lines of the body.

B25 1/8th ELECTRIC TRUGGY

B25.1 Dimensional requirements for 1/8th Electric Truggy class:

Overall Dimensions & Weight	**Minimum**	**Maximum**
Overall Width *(including body) (vehicle must be able to roll out of the measurement box under its own momentum when the box is tilted to approximately 30deg angle.)*	300mm	450mm
Overall Length *(including body)*	465mm	730mm
Overall Height *(overall without aerial – measure with suspension fully compressed)*		250mm
Weight *(with battery and transponder)*	3900g	
Wing Overall Width		217mm
Wing Length		85mm
Wheel Diameter	80mm	97mm
Tyre Diameter	125mm	160mm
Tyre Width	60mm	100mm

B25.2 BODY: Must be a good representation of a Stadium/Arena style truck body. No buggy or sedan bodies will be accepted. In addition:

a. Openings may be cut in the shell to allow for cooling of motor or ESC as long as such cut-outs are included within the manufacturer's original cut lines of the body.