

2022 Quarter Scale Speedway Rules

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GENERAL RULES

Q1 GENERAL

- Q1.1 To be eligible to race a title event the participant must be a financial member, have competed in a minimum of 3 club meeting's as a financial member and hold a NZRCA license. 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 per class permitted per driver in each class per day.
- Q1.2 Only One (1) Car/Complete Chassis per class permitted per driver in each class per day.

Q2 RACE FORMAT

Q2.1 There will be one annual event called New Zealand Championships/Titles to determine the New Zealand Champions in Quarterscale Speedway.

The NZRCA New Zealand Titles will be held over Labour weekend each year unless majority of clubs agree to a date change.

- Q2.2 Participants must be a financial member of a Quarterscale Speedway Club to participate at the New Zealand Championships. (Each member must be allocated a Race Number and a New Zealand Prefix)
 - A: Auckland
 - B: Hawke's Bay
 - C: Christchurch
 - D: Dunedin
 - E: Blenheim
 - G: Gisborne
 - **GM:** Greymouth
 - H: Waikato
 - I: Southland
 - K: Kihikihi
 - M: Mt Maunganui/Tauranga
 - N: Nelson
 - P: Palmerston North
 - R: Rotorua
 - S: Stratford
 - T: Cromwell
 - V: Wanganui
 - W: Wellington
 - Y: Westport
 - **NZ:** New Zealand Championship Place getter (1-3)

Overseas visitors may run their club or country prefix

Q2.3 There will be a drivers 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.

- Q2.4 Points for Heats and finals are tabled below: DNF (Did Not Finish) is allocated the last remaining points after all finishing places are allocated and will at the race directors decision based on when you pulled out of the race.
- Q2.5 POSTION POINTS

$$1^{st} = 12$$
, $2^{nd} = 11$, $3^{rd} = 10$, $4^{th} = 9$, $5^{th} = 8$, $6^{th} = 7$, $7^{th} = 6$, $8^{th} = 5$, $9^{th} = 4$, $10^{th} = 3$, $11^{th} = 1$, $12^{th} = 0$

Q3 RACE PROCEDURES

- Q3.1 Duration of the races
 - Q3.1.1 Heats: 12 Laps
 - Q3.1.2: Finals: 2 x 15 Laps and 1 x 30 Laps
 - Q3.1.3: There must be a minimum of 4 cars nominated in each class for that class to be run at a National Titles or Regional Event.
 - Q3.1.4: The arrangements of the Heats are as follows:

A: New Zealand Titles:

This will consist of 5 Heats per Class with a minimum 3 Heats per Class Or at the discretion of the Chief Steward and the meeting Delegates

A:2.1.5 All drivers are to get a Front; Middle and

Rear row start for their Heats or as fair as

possible.

A:2.1.6 All competitors are to be separated into different Heats or as fair as possible.

B: Regional Title or club days:

This will consist of 3 Heats per Class Or at the discretion of the Chief Steward and the meeting Delegates

B2.1.5 All drivers are to get a Front; Middle and

Rear row start for their Heats or as fair as

possible.

B2.1.6 All competitors are to be separated into

different Heats or as fair as possible.

Q3.2 All Finals / Mains

The 10 highest placed drivers from the heats will qualify directly into the Tier 1 Main. Top 4 Drivers from Tier 3 Main will transfer to the back of the Tier 2 Main. Top 2 Drivers from the Tier 2 Main will start 11th and 12th in the Tier 1 Main.

Q3.3 Number of Drivers

- Q3.3.1 Heats: Maximum 8 10 drivers, track and facilities permitting.
- Q3.3.2 Tier1 Main Final Maximum of 12 drivers.
- Q3.3.3 The race format will be notified in the event information and invitation material.

Q3.4 Starts

- B3.4.1 For the finals, drivers with the highest points may choose their position on the drivers stand.
- Q3.4.2 All starts for Quarterscale Speedway will be rolling, starting with (P1) driver setting the pace.
- Q3.4.3 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.

Q3.4.4 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 3 minutes to carry out repairs on their car, this delay can be granted only once for each final.

- The track is closed unless the delay is requested as a result of frequency or radio problems.

Q3.5 **Starting Procedure of Heats**

- Q3.5.1 There must be a minimum 3-minute gap between the end of one heat and the start of the next heat.
- Q3.5.2 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.

Q3.6 Completion of Heats & Finals

- Q3.6.1 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
- Q3.6.2 In case of doubt (on the finish-line when the laps are completed), a car may race one more lap and finish. Whether he finishes or not when time was completed, is up to the Time-keepers and cannot be disputed. Red Light/Flag will be shown after the chequered flag to signal race is complete.
- Q3.6.3 After returning to the entry gate, the engine must be stopped immediately.

Q3.7 Qualification Order & Finals

- Q3.7.1 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.
- Q3.7.2 In some cases there may be a pole shuffle. (Time dependent, decision is up to chief steward) Pole Shuffle is for the Top 10 Drivers that qualified straight into the Tier 1 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 there is still no result the driver with the fastest lap will be the winner.

Q3.7.4 Finals are run according to the schedule printed in the official race program, which may only be changed by Race meeting Delegate's majority vote or Chief Steward

Q3.8 Wet Track Situation

Q3.8.1 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.

Q3.9 Race Interruptions

Q3.9.1 In the case of a race, which is interrupted for more than 60 minutes for reasons beyond the control of the organizers, Chief Steward will decide whether to cancel or continue the meeting.

- Q3.9.2 In the case of an interruption of a heat the entire heat will be re-run.
 Q3.9.3 In the case of an interruption of finals the following procedure will be used:
 - Q3.9.3a If 20 or more laps have been run in the Tier 1 Finals, the results at the moment of the Interruption will be the final result. For Tier 2 and Tier 3 Finals the entire race will be rerun.
 - Q3.9.3b 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.
 - Q3.9.3c 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. They will be required to switch off the radio and stop the engine. There will be no repairs carried out to the vehicle; the cars are to remain in a parked condition. Any driver who does not observe this rule will be immediately disqualified.

Q3.10 Rain Procedure During Heats

Q3.10.1 The Chief Steward is solely responsible for the decision to stop a race in the event of rain.

Q3.11 Interruption of Finals / Event

Q3.11.1 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.

Q4 TECHNICAL INSPECTION

- Q4.1 At any time of the race weekend the Chief Steward may call any or all of the competitor's cars to the scrutineering area for technical inspection, here you must also show that you have working brakes and your Remote Kill Switch/Failsafe is operational.
- Q4.2 Under all circumstances it is the responsibility of the driver that their car is within the NZRCA 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.

Q5 TRACK MARSHALS

Q5.1 Drivers will act as marshals a per the Chief Stewards requirements. (Marshals are required to wear a high visibility vest when entering the racing arena), 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.

Q6 ON TRACK CAR MAINTENANCE

Q6.1 All Reds are considered "open reds" The marshal may do minor repairs (no tools; 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.

- Q6.2 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.
- Q6.3 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.
- Q6.4 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 race track.

NOTE: Tools may only be used to clear a blocked exhaust pipe outlet!

Q7 STARTS and RE-STARTS SPEEDWAY RULES (COMPRESSED)

- Q7.1 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 drivers takes off between the AZ and the Start/Finish Line then the green light/flag and or audible sound will be given.
- Q7.2 If a race is stopped before the last running car completes the first lap, 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) meter apart.
- Q7.3 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.)
- Q7.4 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.
- Q7.5 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.

Q8 RACE STOPPAGE

Q8.1 Any car(s) considered by the Chief Steward and or Race Control to be involved in 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. If you are deemed to be the cause of 3 stoppages, you will be shown the Black Flag and sent infield whilst the race continues.

Q9 PASSING ON INFIELD

Q9.1 If it is considered a driver has gained a position or advantage by passing or driving on the infield (anything more than the left-hand front wheel under the pole line), the driver may be penalized 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.

Q10 TRACKS

Q10.1 Tracks for Quarterscale Speedway racing will be inspected by NZRCA Officials regarding safety provisions for drivers, mechanics, marshals and spectators. NZRCA Officials have the authority to ask for improvements to be carried out before racing starts. Track size to qualify to host NZRCA events shall have a minimum of 65 Meters with a Maximum of 135 Meters on the pole line and a minimum of 4 Meters wide.

Q11 PROTESTS

A protest may be called if a competitor believes another competitor is cheating. A protest is to be in writing and handed to the Chief Steward within 10 minutes of the end of the race, 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 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.

Q12 TECHNICAL INFRINGMENTS

- Q12.1 If your car is deemed to be illegal the driver of this car may receive a 12-month ban from the sport.
- Q12.2 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.
- Q12.3 Cheating will not be tolerated on any level. The driver is always solely responsible for the vehicle.

Q13 FUEL TANK

- Q13.1 Unleaded / premium unleaded with oil additive only. No other fuels or additives are allowed.
- Q13.2 TANK must be mounted securely within model and made from leak proof material

Q14 ENGINE KILL SWITCH

- Q14.1 Must be fitted and operational to all cars
- Q14.2 Third Channel Remote Kill Switch / Failsafe is mandatory and operational

Q15 RADIO / ELECTRICS

- Q15.1 2.4GHz band radio only
- Q15.2 'D' boxes/and or gyros are NOT allowed, includes any type of assistance e.g. AVC
- Q15.3 ONE only Transponder is to be fitted as near as possible behind front axle

SPRINTCAR SPECIFICATIONS

Q16 General

- Q16.1 Appearance must resemble a full size Sprintcar.
- Q16.2 Must be fitted with wings and nerf bars to resemble a full size Sprintcar.
- Q16.3 All measurements for this model are measured from extreme points.

Overall Dimensions & Weight	Minimum	Maximum
LENGTH		39" / 990mm
WIDTH (measured to outside of tires		20" / 508mm
CHASSIS	11.5" / 290mm	12.5" / 320mm
WHEELBASE	20" / 508mm	24" / 609mm

Q17 Engine

- Q17.1 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.)
- Q17.2 Engine must remain stock internally, NO internal modifications allowed
- Q17.3 Air/fuel intake and exhaust may be modified (as per modifications outlined below)
- Q17.4 Permitted engines are: Zenoah G230RC / G240RC / G260RC / G270RC / or equivalent CY R230 / R260 / F230 / F260 FUELIE engines
- Q17.5 Reed valve engines are NOT allowed
- Q17.6 Ignition system must remain standard as per engine manufacturer including spark plug lead
- Q17.7 Flywheel must remain standard
- Q17.8 Clutch must remain standard as fitted to listed engines 6k-8k
- Q17.9 Aftermarket Pull Start permitted with catch fitted on Flywheel

Q18 ENGINE MODIFICATION

- Q18.1 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 a distance of 10M from the model using an approved measuring device
- Q18.2 INTAKE; Carburetor 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.
- Q18.3 Intake manifold / Air filter is open; rotation of carburetor is allowed. Maximum length of insulator block is 31mm including gaskets.
- Q18.4 Spark plug may be changed no restrictions
- Q18.5 Porting and polishing is NOT allowed

Q19 DRIVELINE

- Q19.1 Rear wheel drive solid axle only with Belt / Chain / or Locked Differentials
- Q19.2 Multi speed gearboxes are NOT allowed

Q20 FRONT AXLE

Q20.1 Solid beam axle only NO independent allowed

Q21 CHASSIS

- Q21.1 Tube type maximum outside diameter 1/2" / 12.7mm
- Q21.2 Plate type maximum thickness 1/4" / 6.3mm

Q22 NERF AND CRASH BARS

- Q22.1 Steel maximum outside diameter 5/16" / 8mm
- Q22.2 Aluminum maximum outside diameter 3/8" / 9.5mm

Q23 BRAKES

- Q23.1 Must be fitted and operational
- Q23.2 No restriction and type or number of brakes fitted

Q24 SUSPENSION

- Q24.1 Independent front or rear is NOT ALLOWED
- Q24.2 Torsion bar or coil spring in any combination front and rear allowed
- Q24.3 Maximum of 4 shock absorbers

Q25 WHEELS AND TYRES

- Q25.1 Maximum rim diameter front and rear 4 1/2"
- Q25.2 Front tires maximum diameter 6" width 2 1/2"
- Q25.3 Rear tires maximum diameter 7" width 4 1/2"

Q26 WINGS

- Q26.1 Top wing- Maximum 18" / 455mm long x 15" / 380mm wide center / 410mm (including sides) Top sides maximum 18" / 455mm long and 7 1/2" / 190mm high
- Q26.2 Front wing- Maximum 6 1/2" / 165mm long x 9" / 230mm wide (including sides)
 - Front sides- Maximum 6 1/2" / 165mm long x 3" / 75mm high
- Q26.3 Mounting of wings can be solid mount (fixed) or Velcro

Q27 RACE NUMBERS

- Q27.1 Must be minimum 70mm high and 50mm wide each number
- Q27.2 Must be fitted to both sides of tail tank in contrasting colour
- Q27.3 Must be fitted to both sides of wing boards in a contrasting colour
- Q27.4 Number must have New Zealand letter adjacent

SUPER DIRT MODIFIED SPECIFICATIONS

Q28 GENERAL

- Q28.1 Appearance must resemble a full size V8 Dirt Modified Speedway Car
- Q28.2 Must be based on Baja 5B Platform from the following Manufacturers HPI / Rovan Sport / King Motor
- Q28.3 Body is mandatory see body specifications below
- Q28.4 Aluminium upgrade to replace plastic parts permitted
- Q28.5 All measurements for this model are measured from extreme points.

Overall Dimensions & Weight	Minimum	Maximum
LENGTH – w/Body Fitted (overall length		910mm
WIDTH – FRONT		480mm
WIDTH – REAR		510mm
BODY WIDTH		480mm

Q29 BODY

- Q29.1 Must be made from Plastic / Aluminium or Fiberglass
- Q29.2 Maximum thickness of body panel material Plastic 3mm / Aluminium & Fiberglass 1.2mm

Q30 ENGINE

- Q30.1 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.)
- Q30.2 Engine must remain internally stock. NO internal modifications allowed
- Q30.3 Air filter and exhaust may be changed (as per modifications outlined below)
- Q30.4 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
- Q30.5 Reed valve engines are NOT permitted
- Q30.6 Ignition system must remain standard as per engine manufacturer including spark plug lead, mechanically fixed timing coil only.
- Q30.7 Flywheel must remain standard
- Q30.8 Clutch must remain standard as fitted to listed engines 6k to 8k springs
- Q30.9 Aftermarket Pull Start permitted with catch fitted on Flywheel

Q31 ENGINE MODIFICATION

- Q31.1 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 a distance of 10M from the model, using an approved measuring device.
- Q31.2 INTAKE; Carburetor 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.
- Q31.3 Non-standard Intake manifold / Air filter are allowed. Maximum length of insulator blocks 31mm including gaskets.
- Q31.4 Spark plug may be changed no restriction
- Q31.5 Porting and Polishing is NOT permitted (No removal of any material)
- Q31.6 Gaskets must be production type and not home made NO copper gaskets

Q32 DRIVELINE

- Q32.1 Rear wheel drive only
- Q32.2 Locked differentials are NOT permitted
- Q32.3 Multi speed gearbox is NOT permitted
- Q32.4 Axle extenders permitted

Q33 FRONT AXLE

- Q33.1 Standard as per manufacturer either e-clip or screwed in.
- Q33.2 Axle extenders permitted

Q34 CHASSIS

- Q34.1 Must resemble Standard 2 piece as per manufacturer (can be plastic, aluminium or carbon fibre)
- Q34.2 Stiffener plate can be fitted to front underside

Q35 NERF AND CRASH BARS

- Q35.1 Front crash bars are allowed as per body specifications i.e., RPM Front Bumper
- Q35.2 Rear crash bars may be fitted but must stay inside the confines of the body

Q36 BRAKES

Q36.1 Must be fitted and operational

- Q36.2 Only manufacturer's standard braking system allowed (disc mounted on hex hub of driveshaft) Upgraded pads and discs allowed
- Q36.3 Four-wheel braking system is not permitted

Q37 SUSPENSION

- Q37.1 Standard length as per manufacturer for 5B Front/Rear
- Q37.2 Shock oil and springs not restricted
- Q37.3 Maximum 4 shocks only

Q38 WHEELS AND TYRES

Q38.1 Aftermarket copies are allowed but have same dimensions as original (Must be commercially available for the Baja 5B) 10/2: Front = 170 x 60 Rear = 170 x 80

Q39 WINGS

Q39.1 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

SPEEDCAR / MIDGET SPECIFICATIONS

Q40 General

- Q40.1 Appearance must resemble full size speedway Midget / Speedcar, modern or vintage style.
- Q40.2 Cars must be based on Smartech / Carson Style Chassis / River Hobby Crocodile / FG Marder / Hobby Pro Mutilator, Chassis only
- Q40.3 Alloy components that resemble commercially available and fitted to the approved vehicle are allowed.
- Q40.4 All measurements for this model are measured from extreme points.

Overall Dimensions & Weight	Minimum	Maximum
LENGTH – Overall		850mm
BODY WIDTH		250mm
WHEELBASE – as per manufacturer		476mm
WIDTH - FRONT		425mm
WIDTH – REAR		450mm
HEIGHT FROM CHASSIS		330mm

Q41 ENGINE

- Q41.1 Maximum Engine Capacity 22.5cc (23cc) as supplied by manufacturer
- Q41.2 Zenoah G230RC / G240RC / and CY R230 / F230 engines are allowed
- Q41.3 Engine must remain standard as per manufacturer's specifications
- Q41.4 Non-Standard Air Filter can be fitted
- Q41.5 INTAKE; Carburetor from listed engines only WT-603(x), 668 (997), 771, 813 (998), 989 and 990 Bearing Modification on main shaft allowed. Inlet manifold may be changed maximum thickness including gaskets 31mm
- Q41.6 Exhaust is to be a standard CAN type or X-Can Billet Muffler, no power pipes
- Q41.7 Engine noise must not exceed 95dba measured from 10M from model using an approved measuring device.
- Q41.8 Clutch must remain standard as fitted to listed engines 6k to 8k springs
- Q41.9 Aftermarket Pull Start permitted with catch fitted on Flywheel

Q42 DRIVELINE

- Q42.1 Differential must be standard, No locked or adjustable differentials
- Q42.2 Metal Gear upgrades are permitted
- Q42.3 Single Speed gearbox only gear ratios may be changed
 - Q42.3.1 Gear ratios: Open must be commercially available SIDE GEARS: Open must be commercially available
- Q42.4 Clutch must remain standard as per manufacturer 6k to 8k springs permitted

Q43 BRAKES

Q43.1 Brakes are to remain standard, no hydraulic or 4-wheel systems permitted

Q44 SUSPENSION

- Q44.1 Shock absorbers are open to all aftermarket replacements of same length as original shocks
- Q44.2 Mounting points for shocks may be moved on to chassis / cage
- Q44.3 Maximum of 4 shocks only

Q45 WHEELS AND TYRES

- Q45.1 Tyre size max = 170mm diameter x 80mm wide
- Q45.2 Wheel adaptors are permitted

Q46 CRASH / NERF BARS / CAGE

- Q46.1 Cage to be constructed of Maximum 3/8" or 10mm steel tubing
- Q46.2 Must have rear and side crash bars, side bars must not be wider than rear wheel width / front bar is optional
- Q46.3 Wings are NOT allowed

Q47 RACE NUMBERS

- Q47.1 Must be minimum 70mm high x 50mm wide each number
- Q47.2 Must be fitted to both sides of tail tank, and on front of car in contrasting colours
- Q47.3 Number to have New Zealand letter adjacent

LATE MODEL SPECIFICATIONS

Q48. GENERAL

- Q48.1 Appearance must resemble full size Late Model Speedway Car
- Q48.2 Must be based on Baja 5B Platform from the following Manufacturers HPI / Rovan Sport / King Motor
- Q48.3 Body is mandatory see body specifications below
- Q48.4 Aluminium upgrade to replace plastic parts permitted
- Q48.5 All measurement for this model are measured from extreme points

Q49 MODEL DIMENSIONS w/BODY FITTED

- Q49.1 MODEL LENGTH w/Body Fitted (OVERALL): Maximum 1200mm
- Q49.2 MODEL WIDTH FRONT: Maximum 510mm
- Q49.3 MODEL WIDTH REAR: Maximum 510mm
- Q49.4 BODY: must be made from Plastic / Aluminium or Fiberglass

- Q49.5 BODY: Maximum thickness of body panel material Plastic 3mm / Aluminium & Fiberglass 1.2mm
- Q49.6 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.
- Q49.7 BODY WIDTH FRONT: Maximum 610mm
- Q49.8 BODY WIDTH REAR: Maximum 610mm

Q50 ENGINE

- Q50.1 Minimum engine capacity 28.5cc (29cc) up to Maximum 31.8cc (32cc) as supplied by Zenoah, CY, KM or Rovan
- Q50.2 Engine must remain internally stock, NO internal modifications allowed (No Ported heads or Scavenger plates allowed)
- Q50.3 Air filter and exhaust may be changed (as per modifications outlined below)
- Q50.4 Permitted engines are: Zenoah G320RC / Rovan 32cc or Standard Engines up to 31.8cc
- Q50.5 Reed valve engines are NOT permitted
- Q50.6 Ignition system must remain standard as per engine manufacturer including sparkplug leads, mechanically fixed timing coil only.
- Q50.7 Flywheel must remain standard
- Q50.8 Clutch must remain standard as fitted to listed engines 5k to 8k springs
- Q50.9 Aftermarket Pull Start permitted with catch fitted on Flywheel

Q50A ENGINE MODIFICATIONS

- Q50A.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 a distance of 10M from the model using an approved measuring device.
- Q50A.2 INTAKE: Carburettor from listed engines only WALBRO WT-603(x), 668, 989, (997), 771, 813, (998), 990 or 1107. Bearing Modification on main shaft allowed. Removal of Choke shaft allowed.
- Q50A.3 Non-standard Intake manifold / Air filter are allowed. Maximum length of insulator blocks 35mm including gaskets.
- Q50A.4 Spark plug may be changed no restriction
- Q50A.5 Porting and Polishing is NOT permitted (No removal of any material)
- Q50A.6 Gaskets must be paper type (production) and not home made NO copper gaskets
- Q50A.7 Bearings must be of stainless-steel type, NO ceramic material permitted

Q51. DRIVELINE

- Q51.1 Rear wheel drive only
- Q51.2 Locked differentials are NOT permitted
- Q51.3 Multi speed gearbox is NOT permitted
- Q51.4 Axle Extenders permitted

Q52 FRONT AXLE

- Q52.1 Standard as per manufacturer either e-clip or screwed in.
- Q52.2 Extenders Permitted

Q53 CHASSIS

- Q53.1 Must resemble Standard 2 piece as per manufacturer (can be plastic, aluminium or Carbon fibre)
- Q53.1 Stiffener plate can be fitted to front underside

Q54 NERF AND CRASH BARS

- Q54.1 Front bumper permitted under nose cone of body
- Q54.2 Rear crash bars may be fitted but must stay inside the confines of the body

Q55 BRAKES

- Q55.1 Must be fitted and operational
- Q55.2 Only manufacturer's standard braking system allowed (disc mounted on hex hub of driveshaft) Upgraded pads and discs allowed
- Q55.3 Four-wheel braking system is not permitted

Q56 SUSPENSION

- Q56.1 Standard length as per manufacturer for 5B Front/Rear
- Q56.2 Shock oil and springs not restricted
- Q56.3 Maximum of 4 shocks only

Q57 WHEELS AND TYRES

Q57.1 Aftermarket copies are allowed but have same dimensions as original (Must be commercially available for the Baja 5B, Maximum 170 x 80mm) Rear Wheels and Tyres are permitted to also be fitted on the Front

Q58 WINGS

Q58.1 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

Q59 FUEL / TANK

- Q59.1 Fuel = Unleaded / Premium unleaded with oil additive only, no other fuels or additives are allowed
- Q59.2 Tank = Must be mounted securely within vehicle

Q60 KILL SWITCH

- Q60.1 Must be fitted and operational and may be identified by a blue triangle on body
- Q60.2 Third Channel Remote Kill Switch / Failsafe is mandatory and operational

Q61 RADIO / ELECTRICS

- Q61.1 2.4GHz band radio only
- Q61.2 'D' boxes/and or gyros are NOT allowed, includes any type of assistance e.g. AVC
- Q61.3 ONE only Transponder is to be fitted as near as possible behind front axle

DIRT MODIFIED SPECIFICATIONS

Q62 GENERAL

Q62.1 Appearance must resemble a full size UMP Dirt Modified Speedway Car (see Q63 Body rules for base specification)

- Q62.2 Must be based on Baja 5B Platform from the following Manufacturers HPI / Rovan Sport / King Motor
- Q62.3 Body is mandatory see body specifications below
- Q62.4 Approved upgrade parts to replace stock parts for durability purposes only are permitted, see Q74 for approved upgrade list.
- Q62.5 All measurements for this model are measured from extreme points.

Overall Dimensions & Weight	Minimum	Maximum
LENGTH – w/Body Fitted (overall length		910mm
WIDTH – FRONT		480mm
WIDTH – REAR		510mm
BODY WIDTH (V1 BODY WIDTH)		360mm

Q63 BODY

- Q63.1 Must be made from Plastic / Aluminum or Fiberglass
- Q63.2 Maximum thickness of body panel material Plastic 3mm / Aluminum & Fiberglass 1.2mm
- Q63.3 Body must match the specification outlined in appendix 1.

Q64 ENGINE

- Q64.1 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.)
- Q64.2 Engine must remain internally stock. NO internal modifications allowed
- Q64.3 Air filter may be changed (as per modifications outlined below)
- Q64.4 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
- Q64.5 Reed valve engines are NOT permitted
- Q64.6 Ignition system must remain standard as per engine manufacturer including spark plug lead, mechanically fixed timing coil only.
- Q64.7 Flywheel must remain standard
- Q64.8 Clutch must remain standard as fitted to listed engines 6k to 8k springs
- Q64.9 Aftermarket Pull Start permitted with catch fitted on Flywheel

Q65 ENGINE MODIFICATION

Q65.1 EXHAUST: Non-standard is NOT permitted and must be a pressed steel can type, A standard diameter tube may be fitted for oil residue to clear back of chassis not be longer than the body, must be contained within the body. Engine Noise must not exceed 95Dba from a distance of 10M from the model, using an approved measuring device.

- Q65.2 INTAKE; Carburetor is limited to a Walbro 668 type, (Choke Type) Bearing modification on main shaft NOT allowed.
- Q65.3 Only stock plastic Intake manifolds are allowed however DDM 1 inch Velocity Stack is permitted. Maximum length of insulator blocks 31mm including gaskets.
- Q65.4 Spark plug may be changed no restriction
- Q65.5 Porting and Polishing is NOT permitted (No removal of any material)
- Q65.6 Gaskets must be production type and not home made NO copper gaskets

Q66 DRIVELINE

- Q66.1 Rear wheel drive only
- Q66.2 Locked differentials are NOT permitted
- Q66.3 Multi speed gearbox is NOT permitted
- Q66.4 Axle extenders permitted
- Q66.5 Spec Gearing of 17T Pinion/57T Spur mandatory
- Q66.6 NO Ceramic Bearings allowed

Q67 FRONT AXLE

- Q67.1 Standard as per manufacturer either e-clip or screwed in.
- Q67.2 Axle extenders permitted

Q68 CHASSIS

- Q68.1 Must resemble Standard 2 piece as per manufacturer (must be aluminium)
- Q68.2 Stiffener plate can be fitted to front underside

Q69 NERF AND CRASH BARS

- Q69.1 Front crash bars are allowed as per body specifications i.e., RPM Front Bumper
- Q69.2 Rear crash bars may be fitted but must stay inside the confines of the body

Q70 BRAKES

- Q70.1 Must be fitted and operational
- Q70.2 Only manufacturer's standard braking system allowed (disc mounted on hex hub of driveshaft) Upgraded pads and discs allowed
- Q70.3 Four-wheel braking system is not permitted

Q71 SUSPENSION

- Q71.1 Standard HPI, Rovan, King motors for 5B Front/Rear only
- Q71.2 Shock oil and springs not restricted
- Q71.3 Maximum 4 shocks only

Q72 WHEELS AND TYRES

Q72.1 Aftermarket copies are allowed but have same dimensions as original (Must be commercially available for the Baja 5B) 10/2: Front = 170 x 60 Rear = 170 x 80. Front wheels must be standard dirt buster type or double blade, rear must be dirt buster pin type (tit pins allowed)

Q73 WINGS

Q73.1 Front or rear wings and spoilers are NOT permitted.

Q74 APPROVED UPGRADE LIST

Q74.1 Steering

- Rovan Symsteer
- FG Servo Saver
- Viper RC Steering Linkage Upgrade

Q74.2 Suspension

- RPM Front Arm Set
- RPM Rear Arm Set
- Kraken Chrome Clipless Hinge Pins
- Rovan Front Alloy Shock Mount
- Rovan Rear Alloy Shock Mount

Q74.3 Driveline

- Rovan Hex Clutch Bell
- Rovan Hex 17T Pinion
- Vertigo Hex Clutch Bell Vertigo 17T Pinion
- Hostile 57T Spur Gear
- Kraken Clipless Layshaft
- Rovan Alloy Clutch Carrier
- AVID Revolution Bearing Kits

Q74.4 Engine

- DDM Racing 1" Velocity Stack
- Outerwear Crank Case Cover
- Outerwear Pullstart Cover

Q74.5 Chassis

- Rovan HD Front Top Chassis Plate
- Viper RC Front Chassis Stiffener Plate
- RPM Front Bumper
- RPM Back Bumper