

# hamilton

## Radio Control Car Club (Inc.)

### HRCCC Rules for All Club Classes updated 27/1/2015

Note: Changes are highlighted in Red.

Hamilton Radio Control Vehicle Club is affiliated to the New Zealand Radio Control Association (NZRCA) and as part of our affiliation we run our Vehicle classes to the NZRCA rulebook. Whether it's Electric Onroad, Electric Offroad or Gas Offroad, each Vehicle must comply with the rules.

These rules are created by every club and are standardised across the country. By running to NZRCA rules means that our members know they can take their cars to any other meeting nationwide and their cars will be legal.

In addition to class rules, HRCCC also has general rules which apply to the meeting you attend. This covers things like marshalling, smoking, drinking, etc. We like to think of ourselves as a family orientated sport/hobby and expect the racing to be a social occasion fit for all ages. The following class rules cover the main criteria a race Vehicle must meet for it to be deemed as legal for receiving results and points at HRCCC events. These should be treated as advisory only as each Vehicle and driver must meet all of the NZRCA rules found in the latest NZRCA rulebook. These are the points that are used on a regular basis for scrutineering purposes. If you have any questions regarding the info below, please ask to speak to a committee member or email the club at [secretary@hrccc.co.nz](mailto:secretary@hrccc.co.nz).

Rules are as follows:

#### **General Club Rules**

Children under 16 years of age cannot be used as substitute marshalls without prior agreement from race director.

Children racing Juniors must be accompanied by an adult when marshalling.

No consumption of alcohol during meeting.

Drugs of any variety will not be tolerated.

Smoking must be done outside of the racing establishment.

No open toe shoes (e.g. Jandals) or bare-feet are permitted.

Swearing, yelling or abusive behaviour will not be tolerated.

Parents are expected to watch their children.

A committee member or race director's decision is final.

No cars can circulate around the track without a body shell. The body shell must be secured to the chassis at all times.

No cars are to be driven in the reverse direction of the track.

All LiPo battery packs must be charged at 1c rating and inside a fire resistant bag.

A class must have no less than 3 Vehicles in it to be considered complete. Note; the Junior class is the only class that is exempt from this rule.

Failure to adhere to the above rules will result in race penalties as seen fit by the race director.

### **HRCCC Club Champs**

Only financial club members can receive points towards the club championships. Racers must complete the 'final' on club nights to achieve a result. Results cannot be awarded on qualifying. Any club member that completes 70% of the seasons 'points' meetings will automatically receive a trophy and certificate to reflect their championship position. Those who do not complete 70% of the meetings will receive a certificate only. All juniors, no matter how many rounds completed, will receive a trophy or medal for participation.

### **General Racing Rules**

Qualifying for a Final – All drivers who enter a meeting must complete a timed lap during a qualifying heat to be permitted to race in a final.

You MUST marshall the race immediately after yours. Failure to marshall will result in race penalties. If you are unable to marshall, you must find a replacement marshall and advise race control of this.

Substitute marshalls are only permitted with permission from the race director. Failure to advise the race director of a marshall substitution will result in race penalties.

All Marshalls must be in place within 30secs of the start – failure to meet this requirement will result in race penalties.

Marshalls must be present at the cone number that matches their grid position printed on the grid listings, not at their finishing position in their race.

## Class Rules for Indoors

### ***Tamiya M-Chassis (Minis and Swifts)***

- Any Tamiya M03, M05 chassis Vehicles apart from:
  - RC Fiat Abarth 1000 TCR – M05 Berlina Corse (#58465)
  - RC Suzuki Swift Super 1600 – M05Ra (#58464/#58471)
  - Any M03/M05 PRO kit (#58443/#84131)
  - Any M03/M05 R kit (#84023/#49417)
- Vehicles must be assembled as per Instruction Manual.
  - Modifications to the chassis/power train are not allowed.  
Examples of illegal modifications include but are not exclusive to:  
Chassis lightening, Bumpers, Over filling differential and/or diff locking, Weights, Steering modifications, Ball connector resizing and Turnbuckles.
- A minimum weight limit of 1230gms (with transponder) will apply.
- The following Hop-Ups are allowed:
  - Standard ball bearing kit (no ceramics)
  - Tamiya M03 /M05 sway bay kit
  - M Chassis reinforced gear set Tamiya part number 54277
  - Tamiya High Torque Servo Saver.

***NO OTHER OPTIONS PARTS ARE PERMITTED.***

- Only bodies listed below are permitted:
  - Blitz Mini RS1 – Part# 60905
  - Blitz Mini EP High Roof Sedan - Part# 60903
  - Blitz Mini GTI – Part# 60904
  - Blitz Mini Jazz – Part# 60906
  - Colt Mercedes A-Class M1107 - Part# CB0212
  - Colt Mini Cooper M1108 - Part# CB0213
  - Colt VW Beetle M1105 - Part# CB0210
  - Colt Porsche 911 GT1 M1110 - Part# CB0215
  - Colt Fiat M2308 - Part# CB0218
  - Colt Subaru Impreza M1109 - Part# CB0214
  - Colt March M2305 – Part# CB0216
  - Colt Mitsubishi Evo M1106 – Part# CB0211
  - Colt NSU TT M2307 – Part# CB0217
  - Colt Suzuki Swift M2309 – Part# CB0219
  - Colt Toyota Yaris M2313 – Part# CB0220
  - MatrixLine Suzuki Swift – Part# 201027
  - MatrixLine Fiat 500 – Part# 201028
  - MatrixLine Classic Mini – Part# 201029
  - MatrixLine New mini – Part# 201030
  - Ride Subaru WRX STI – Part# 27004
  - Ride Subaru BRZ – Part# 27024
  - Ride ML EVO X – Part# 27010
  - Spice Suzuki – Part# SPA162
  - Spice Toyota Starlet – Part# SPA164
  - Spice Mitzi I-Miev – Part# SPA167
  - Spice Suzuki Cappuccino – Part# SPA621
  - Spice Suzuki Wagon R – Part# SPA613

- Spice Toyota AE86 Trueno – Part# SPA615
- Tamiya Rover Mini Cooper – Part# 50795
- Tamiya Mini Cooper S2006 – Part# 51335
- Tamiya Suzuki Swift Super 1600 – Part# 51236
- Tamiya Fiat Abarth 500 Assetto Corse – Part# 51387
- Tamiya Fiat 500 – Part# 51363
- Tamiya Alfa Romeo MiTo – Part# 51404
- Tamiya Fiat Abarth 1000 TCR – Part# 51424
- Tamiya Mazda Rx7 1st Gen – Part# 51451
- Tamiya Honda Mugen CRX - Part# 51467
- Tamiya Mini JCW Coupe – Part# 51489
- Tamiya Nissan Silvia S13 – Part# 51496
- Tamiya Honda S800 - Part# 51402
- Only tyres permitted are the control tyres purchased from HRCCC.
- Drilling extra vent holes to the wheels is illegal.
- Only Tamiya plastic damper may be used (No Oil Filled shocks). A pair of M03 kit (non-oil filled) shocks maybe used on the rear of an M05 chassis.
- Any modification not called out specifically in these rules is not legal.
- 20t, 18t OR 16t pinions only
- Ride height will be minimum 7mm
- Tamiya Silver Can motors only (Mabuchi RS540 Standard Motor, Johnson RS540 part# 53689 or Mabuchi RS540SH) – No four slot Tamiya motors allowed.
- Either the 3-step mechanical speed controller, as supplied in the kit or the Tamiya ESC model TEU-101BK - P/N 45029, TEU-104BK – P/N 45041, TEU-105BK – P/N 5055, TBLE-02S – P/N 45057, are permitted. The battery plug may be changed, however no other component/s relating to the speed controller maybe altered.
- Any 6 cell Nicad, 6 cell NiMH or 7.4v 2s LIPO stick pack is legal for this class. However, LIPO batteries must fit the factory battery compartment (having a rounded profile) with no modifications to this part of the chassis is permitted. There is no Mah or C rating limit.
- An external lipo cutoff device is permitted.

## **21.5 / Stock Touring**

- Restricted to 2WD and 4WD Touring Vehicle Chassis. Chassis must have independent suspension to all four wheels. Each driven wheel must have a flexible joint e.g. universal joint.
  - Chassis must be commercially available.
  - Vehicle must weigh no less than 1380 grams with transponder.
  - Tamiya Silver Can motors (Mabuchi RS540 Standard Motor, Johnson RS540 part# 53689 or Mabuchi RS540SH) or any 21.5 turn brushless motor found on the NZRCA approved list as at 1<sup>st</sup> January. No Tamiya Silver Can ‘four slot’ motors allowed.
- Approved 21.5 motors are:
- Stock/21.5 Spec - Hobbywing Grey=90040151 XeRUN
  - Stock/21.5 Spec - Hobbywing Blue=90040150 XeRUN
  - Stock/21.5 Spec - Novak Ballistic 3621
  - Stock/21.5 Spec - Novak Vulcan Stock Spec 21.5T Brushless Motor (NOV3648)
  - Stock/21.5 Spec - Speed Passion Competition V3 SP 138215V3 21.5T
  - Stock/21.5 Spec - Speed Passion MMM competition 21.5T Brushless Motor (Red sensor Only)
  - Stock/21.5 Spec - Thunder Power Z3R-S21.5 p/n TPM-540A215
  - Stock/21.5 Spec - Viper RC VST 21.5T (PN8VST215001)
  - Stock/21.5 Spec - Team Powers Actium – TP-BLM-215100ACT

- Stock/21.5 Spec - Hobbywing Quicrun 21.5t (3650)
  - Stock/21.5 Spec - Team Powers Plutonium 21.5T Brushless Motor ( TP-BLM-215100-PL)
  - Stock/21.5 Spec - Hobbywing V10-21.5t PN-30401020049
  - Stock/21.5 Spec - Turnigy ( Trackstar ) 21.5Turn Brushless Motor – (919200034)
  - Stock/21.5 Spec - Muchmore FLETA ZX Brushless Motor ( MR-FZX215)
  - Stock/21.5 Spec - Tekin Redline Gen 2 Brushless Motor (TT2403)
  - Stock/21.5 Spec - Reedy Sonic 540 Mach 2 # 231
  - Stock/21.5 Spec - Savox SX-1 Stock Spec BLH3650-0032
  - Stock/21.5 Spec - LRP X20 Stock Spec – (50864)
  - Stock/21.5 Spec - LRP Vector K7 – (LRP50491)
  - Stock/21.5 Spec - SkyRC Ares Pro Spec – (SK-40003-33)
  - Stock/21.5 Spec - Reds Racing Pn. MTTE 0008
  - Stock/21.5 Spec - Dualsky Z5-53653
  - Stock/21.5 Spec - Dynamite Platinum – DYNP 1021
  - Stock/21.5 Spec - Orca RX3 Brushless Motor - (OMR215RX3)
- Electronics Speed Controllers must either be 'Spec' or operated in 'Blinky' mode. Any type of timing advancement is strictly forbidden.
  - Vehicle must use a 2cell LiPo/LiFe or 6cell Nimh/NiCad 7.2v battery pack
  - Rubber tyres only permitted for class.

### ***Stock Trucks***

- Chassis must run large truck style type tyres and rims.
- Chassis must be commercially available.
- Bodies to be of a pickup truck type only.
- Truck must weight no less than 1700 grams with transponder
- Motors are restricted to 10.5 turns or higher.
- Electronics Speed Controllers must either be 'Spec' or operating in 'Blinky' mode. Any type of timing advancement is strictly forbidden.
- Truck must use a 2cell LiPo/LiFe or 6cell Nimh/NiCad 7.2v battery pack

### ***Super Stock***

- Restricted to 2WD and 4WD Touring Vehicle Chassis. Chassis must have independent suspension to all four wheels. Each driven wheel must have a flexible joint e.g. universal joint.
- Vehicle must weigh no less than 1380 grams with transponder.
- Vehicle must use a ROAR approved 13.5turn brushless or ROAR approved 27turn 24degree rebuildable brushed motor.
- Vehicle must use a 2cell LiPo/LiFe or 6cell Nimh/NiCad 7.2v battery pack
- Rubber tyres only permitted for class.

### ***2WD Buggy***

- Restricted to 2WD Offroad Buggy Chassis with no more than two driven wheels.
- Vehicle must weigh no less than 1474 grams with transponder.
- Motors are restricted to 10.5 turns or higher.

- Electronics Speed Controllers must either be 'Spec' or operating in 'Blinky' mode. Any type of timing advancement is strictly forbidden.
- Battery are restricted to
  - LIPO - maximum voltage of 8.4 volts.
  - NIMH/NICAD - 6 cells with a nominal voltage of 1.2 volts per cell – 7.2 volt total
- Body must be of an offroad buggy type only.
- Rubber tyres only permitted for class.

### **4WD Buggy**

- Restricted to 4WD Offroad Buggy Chassis.
- Vehicle must weigh no less than 1588 grams with transponder.
- Motors are restricted to 10.5 turns or higher.
- Electronics Speed Controllers must either be 'Spec' or operating in 'Blinky' mode. Any type of timing advancement is strictly forbidden.
- Battery are restricted to
  - LIPO - maximum voltage of 8.4 volts.
  - NIMH/NICAD - 6 cells with a nominal voltage of 1.2 volts per cell – 7.2 volt total
- Body must be of an offroad buggy type only.
- Rubber tyres only permitted for class.

### **2WD Short Course**

- Restricted to 2WD Short Course Truck Chassis with no more than two driven wheels.
- Vehicle must weigh no less than 2100 grams with transponder.
- Motor is restricted to a minimum of 10.5 turns.
- Electronics Speed Controllers must either be 'Spec' or operating in 'Blinky' mode. Any type of timing advancement is strictly forbidden.
- Vehicle must use a 2cell LiPo/LiFe or 6cell Nimh/NiCad 7.2v battery pack
- Rubber tyres only permitted for class.

### **Rally Car**

- The car is to remain as per kit unless otherwise specified.
- Ride height may be adjusted using factory spacers but the car can be no lower than 10mm ready to race. Ride height will be measured by dropping the car on the table letting it settle and sliding a 10mm block underneath the front and rear of the chassis. The block cannot touch the chassis.
- These kits come with spacers inside the front shocks to set droop. Adding spacers will result in less droop. Droop will be measured by the car sitting on a 20mm block if the wheels cannot touch the ground then that is a fail test. (Out of the box kits pass this test no problem)
- Tyres may have CA glue smeared on the sidewall to prevent traction rolling but no other changes can be made to the tread pattern insert or rim.
- Clear bodies may be purchased and painted but wings must always be fitted.
- Min Weight limit with Transponder 1000g
- Kits allowed to race in Class, Kalahari VTR01001 & Kemora VTR01000

- If you purchase a Kemora you may convert it to a Kalahari or vice versa using the body and wheels listed below.
- You may replace the kit radio and receiver with anything of your choice.
- You may run a Hard case 2 Cell Lipo, You may change the battery mount system to suit the battery but it must be well secured.

Optional Accessories:

- VTR210002 Pre Painted Body, Kalahari
- VTR210001 Pre Painted Body, Kemora
- VTR210006 Clear Body, Kalahari
- VTR210003 Clear Body, Kemora
- VTR210005 Wing & Mirror Set, Kemora & Kalahari
- VTR211007 Front Bumper Set, Kemora (Required if converting Kalahari to Kemora)
- VTR211008 Rear Bumper Set, Kemora (Required if converting Kalahari to Kemora)
- VTR211009 Front Bumper Set, Kalahari (Required if converting Kemora to Kalahari)
- VTR211010 Rear Bumper Set, Kalahari (Required if converting Kemora to Kalahari)
- VTR41001 Front or Rear Kit Tire (2pcs) Kalahari
- VTR41000 Front or Rear Kit tire. (2pcs) Kemora