

# Hills Offroad Vintage Festival Guidelines 2021

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## **1. GENERAL GUIDELINES FOR VINTAGE CLASSIFICATION:**

The main aim of these events is to have fun obviously, but a part of that fun is feeling like everyone is competing in the same spirit of the event. With that in mind, the cut off for Vintage cars is there for a reason and the concept is pretty simple regarding modifications. If the modification involves changing the geometry of the car ie 1993 shock towers give a better/different geometry to the 1992 ones, then they shouldn't be on the car. However, if it's the case that the upgrade is purely a reliability one ie using a 93 slipper on a 92 car to protect the drive train or stronger belts, then it is deemed ok, but don't replace the whole transmission with a unit from a later model in the name of reliability. If the item is both stronger and changes geometry it's not allowed.

The cut off date refers to the date the buggy was available for purchase on the retail market. Please also refer to the Vintage Eligible buggy and truck lists attached to the main post in the thread. A lot of work has gone into putting the lists together but it is not always correct and if you have a buggy not listed, please get in touch and I can add it.

Unless specific class requirements state otherwise, the fitting of later model shocks, wheels and tyres and other small parts is acceptable – as sometimes they are simply impossible to find and/or maintain. We need to keep the cost of racing a vintage buggy reasonable, but fitting version 2 associated big bores on your car isn't in the spirit of the rules

Categories for Vintage racing are:

- VINTAGE Buggy: Cut off date December 31, 1992. 2wd and 4wd classes - open and stock
- 2wd Classic Buggy: Buggies released before 31/12/97, 4wd Classic Buggy: Buggies released before 31/12/96 - Sport tuned motor only part number 53068 (supply your own) (May also run Johnson 540 or torque tuned motor)
- Stadium Truck: Cut off date December 31, 1996. Roar legal Brushless 17.5 turn with Zero degree timing stock spec esc (Blinky mode) (higher winds such as 21.5 may be run) or 15t Sealed can Brushed motor (Core-rc/Dynamite or HPI firebolt (You may also run sport tuned, torque tuned or Johnson 540 motor)
- Stock truck: Truck eligibility / motor option determined by the list in the class description and control rear tyre
- Purist – Pre and Circa 1987 world titles. See class description for more details
- PLASTIC Fantastic: Cut off date December 31, 1988. Stock motor
- 4wd Outlaw: Open to 4wd buggies from 1997 to 2009. This class will use the standard 540 Johnson motor available from the club with proposed control tyres
- 2wd Outlaw: Open to 2wd buggies from 1997 to 2010. This class will use the standard 540 Johnson motor available from the club and control tyres

## **2. CLASSES AVAILABLE**

### 2wd Day

- 2wd Vintage Stock
- 2wd Open (Vintage & Classic)
- 2wd Classic Sport tuned
- 2wd Purist Stock
- Plastic fantastic
- Stock Truck
- 2wd Outlaw

### 4wd Day

- 4wd Stock Vintage
- 4wd Open (Vintage & Classic)
- 4wd Classic Sport Tuned
- 4wd Misfits / Pipe Frame
- Hotshot
- 4wd Outlaw
- Stadium Truck

### **Race Format**

All races are 5 minutes long plus time to complete the last lap and all races are grid start as it was done back in the day. There will be 3 qualifiers and 3 Finals including 3 finals for B finals if time permits

Grid for the first qualifier will be random and grids for 2<sup>nd</sup> and 3<sup>rd</sup> qualifiers are based on the finishing position from the previous race. Grid positions for the finals are based on fastest qualifying time (best run). The results for each class will be determined based on best 2 results in the finals with tie breaker being fastest time per IFMAR scoring system. All races will be grid starts

### 3. CLASS SPECIFIC GUIDELINES

**Plastic Fantastic:** Any 2wd car that was released with fixed camber front and rear up to the end of 1988. Solid axle buggies like the Hornet and Grasshopper are also included in the class. Basically this class is for entry level buggies. Springs can be changed, but the car must retain original shocks. All internal gearbox components must be factory standard and the maximum pinion allowable is the largest pinion indicated in the manual, no dremelling of the gearbox to shove bigger pinions in. No other modifications or option parts are allowed other than bracing for reliability. Buggies that have been modified to have adjustable camber should be entered in the 2wd purist class. The motor for this class is the Johnson 540 handout motor. (Same as the stock class). Tyres and wheels are open

**2wd Purist:** This class harks back to the classic battle of the 1987 worlds. Kyosho had brought out the Ultima with a pledge that it would beat Associated's all-conquering RC10 and win the Worlds that year (which it did). Eligible cars include RC10 Gold pan (short arm/6 gear-no mods or hop ups – rere allowed), Kyosho Ultima ladder style or Pro (no mods or hop ups), plastic fantastic cars (period option parts allowed) and the SRB series, plus the kyosho beetle/Tomahawk/Scorpion. The rere ultima is also eligible- the requirements are that you will need to change the rear tyres to one of the choices below or something less racey and you need to run the standard shocks and other standard parts that come with the car such as the gear diff. You may change simple things like screws, turnbuckles, oils, springs, pinions. All cars must run on original/Old school tyres and the handout Johnson 540 is the motor for this class. The "best" tyres you are allowed to fit to the car are the 2014 scorpion ones [http://www.rcmart.com/kyosho-sct002sb-rear-tire-winner-soft-2pcs-scorpion-2014-p-83339.html?cPath=595\\_736\\_1809](http://www.rcmart.com/kyosho-sct002sb-rear-tire-winner-soft-2pcs-scorpion-2014-p-83339.html?cPath=595_736_1809) or the Schumacher T650 spike <https://www.racing-cars.com/full-spike-2-rear-tyres-yellow-cat-pr-t650> so you have options up to a 2 inch tyre.

**Pipe frame:** This class is aimed at the 4wds that utilise a pipe frame as opposed to a body shell. The cars that fall into this category are the Mugen Bulldog and Hirobo Zerda, please get in touch if you have another buggy you believe fits into the category. Tyres are open and motors are the handout stock 540 motor.

**Misfits:** Aimed at entry level, chain driven and obscure 4wds such as the thundershot series buggy, Kyosho Rocky or Mugen, Nikko, AYK, SG, Royal Ripper, Nichimo, Hirobo or Marui brands. The rere original Optima is also legal for this class but must be run in stock trim with only tyres, springs and oils open to be changed. There will be a breakout lap time for the class (which means a minimum lap time) so if your car goes faster than the breakout lap time you'll be encouraged to either move it up to 4wd 540 or de-tune your car. If you're unsure if your car is eligible, please pm me, (Hint; a Nikko Brat up works spec'd should be in 4wd 540). We've added the avante rere and vanquish buggies (rere allowed) this year. Tyres are open and motors are the handout stock 540 motor.

## Hotshot Class

Eligible cars for the HOTSHOT Class are:

- Hot Shot
- Boomerang
- Super Shot
- Big Wig
- Hot Shot II
- Super Sabre

The eligible buggies for the Hot Shot class are limited to the above mentioned buggies only. The motor for this class is the Johnson 540 handout motor. (Same as the stock class). The aim for this class is that someone could buy a re-release kit and go racing merely by finding the right pinion (17 tooth maximum) and modern tyres so the cars should remain as stock, standard cva shocks must be used, all internal gearbox components must be standard. Interchanging of parts between these cars is fine. ALL cars must retain a strong resemblance to the original buggy where possible (period correct aftermarket bodies are acceptable). Tyres and wheels are open.

**Stadium Truck:** all vintage and classic 2wd trucks up to the end of 1996 will be eligible for the class. The motor is 17.5 turn brushless using an esc with stock spec Zero timing (blink mode) or the brushed option is 15t Sealed can Brushed motor (Core-rc/Dynamite or HPI firebolt. You may also use higher wind motors like sport tuned/torque tuned for brushed or 21.5 for example in brushless

**Classic Buggy:** This is for buggies released before 31/12/97 for 2wd and 31/12/96 for 4wd. Both 2wd and 4wd will be run and the motor is the sport tuned part no. 53068. (supply your own motor) All vintage eligible buggies can be run in this class so if you're torn between running your 870c or egress, run 1 in vintage and the other in classic.

**4wd Outlaw:** Open to 4wd buggies from 1997 to 2009 encompassing buggies such as the Losi XX4/XXX4, Predator Schumacher Cat SX & Cat 3000, Yokomo MR4 variants, Kyosho ZX5 variants, JConcepts BJ4, Associated B44/B44.1, Tamiya 501x/511/DB01/DB01R (502x allowed as its basically a shaft driven 511), Hot Bodies D4 and Durango DEX410 (original release). The aim of this class is to showcase what was a very interesting period in 4wd with Losi bringing out 2 models, Schumacher with a redesign of the cat 2000 brought out the 3000 with a new chassis layout then the SX, Yokomos successor to the YZ-10 the MX4 was released and subsequently the MR4-BC which was based on their touring car and of course the predator came out with in board shocks and shaft drive. This class will use the standard 540 Johnson motor available from the club. As always, if you have extra 4wd buggies from earlier years and want to give them a run, you are more than welcome to run them in this class. If there's no upset from the competitors in this class, I'd like to propose that this class also use M3 Holeshots as the control tyre both front and rear with standard inserts to be used. Link to front tyre <https://www.campbelltownhobbies.com.au/proline-front-hole-shot-2-0-2-2-4wd-m3-soft-8207-02>

**Outlaw 2wd:** We're also looking at a Demo outlaw class for 2wd for rear motor buggies only with a cutoff roughly around 2010, this will encompass all variants of the Losi XXX and Kyosho RB5 as well as Associated B4 and B4.1, Schumacher Fireblade series and the Tamiya 201. Rear motor only (no custom or commercially available mid motor conversions) also we'll keep it at original wheelbase so no "+8mm" chassis extensions etc This class will have a control tyre from the outset in line with the new 540 class the Hills off road club has been running in 2020 which uses Proline M3 holeshots on the rear and Proline M3 ribs on the front, links to the tyres are below. Standard foam insert to be used. The motor for this class will be the Johnson 540 motor available from the club or from RC Hobbyland or Campbelltown Hobbies part JOH683

Control tyre: Rear Proline M3 Holeshoot #PR8206-02 -> <https://www.campbelltownhobbies.com.au/proline-rear-hole-shot-2-0-2-2-m3-soft-8206-02>

Front 2WD Proline 4 rib M3 #PR8175-02 -> <https://www.campbelltownhobbies.com.au/proline-4-rib-2wd-m3-soft-front-tires-2pcs>

**Stock Truck:** This is a class that is skewed for juniors / enthusiasts and to encourage the use of older trucks. The idea is for a class for lower points trucks (based on the Enduro buggy list 2.5 and below) and evening them out with motors. So trucks below 2 points run sport tuned, trucks at 2 points run torque tuned and 2.5 point trucks run the Johnson 540. Juniors get to run 1 motor grade higher so a junior could run a Torque tuned in a Losi LXT and juniors are allowed to run 3 point trucks with a 540 Johnson motor. We can also allow 4wd trucks if there's interest which includes the HPI RS4MT. For converted 4wd buggies based on 4.5 point cars such as Lazer will run the Johnson 540 and lower point 4wds will run the torque tuned. I've attached a pic of the trucks and their respective motors that can be run. We might also utilise the enduro driver points system where maybe Bronze and Silver/Bronze drivers can run the same options as the Juniors. I've included a list of which trucks go with which motors and which drivers

Again, as this is a new class, I'd like to try running it on a control rear Holeshoot tyre from the outset. Link to tyre <https://www.campbelltownhobbies.com.au/proline-holeshoot-t-2-2-m3-soft-off-road-truck-rear-tires-2pcs>

If there are any issues, please get in touch, I don't want to turn people away if they've got a truck like a blitzer with stock tyres on it for example

<b>Stock / Junior Truck</b>	<b>Senior</b>	<b>Junior/ Bronze</b>
Late Race Stadium trucks Associated RC10T2, Losi XXT, HPI RS4MT (4wd)	No	540
Race Stadium trucks Associated 10T Losi JRXT/LXT, Traxxas Eagle/SRT, Kyosho XRT, Schumacher Storm 2000, Tamiya Dyna Blaster	540	Torque Tuned
Low end Stadium trucks Kyosho Ultima Outlaw/Outrage, Schumacher Shotgun/Storm, Futaba FXT	Torque Tuned	Sport Tuned
Tamiya King Cab Truck series & Blitzer series and other plastic type trucks such as Kyosho Outlaw Raider	Sport Tuned	Sport Tuned

#### **4. ALLOWED MOTORS AND BATTERIES**

Category motor basics:

- STOCK – RS540 Johnson 540 grey endbell handout motor can be bought from club or motors from previous festival or enduros may be re-used (Motors available for \$20 each. Please order motors when you submit your entry) Motors can also be bought from RC Hobbyland or Campbelltown hobbies part no. JOH-683)
- OPEN – any motor - brushed or brushless.
- SPORT TUNED – Tamiya sport tuned motor part number 53068 (supply your own)
- Stadium truck – 15t Sealed can Brushed motor (Core-rc/Dynamite or HPI firebolt or any 17.5 Roar legal brushless motor using an esc on zero timing (blinkly) mode
- Outlaw – Uses the Stock Johnson 540

Category Batteries:

- Hard case 2s Li-Po 7.4 v nominal voltage maximum (LiHV not allowed). Batteries must be charged to a maximum of 8.4v (it's your responsibility to ensure you understand how to operate your charger correctly to charge on Lipo setting, if in doubt, ask around at the track or any of the Hills Off road team and we'll be able to help
- Sub-C cells. 7.2 v nominal voltage maximum Nimh or Nicad

## 5. DRIVING STANDARDS AND ETIQUETTE:

We understand that a lot of vintage enthusiasts aren't well seasoned racers, which is why it's great to get a chance to get everyone out on the track with fellow minded people who all have a respect for these old machines. The driving standards have been excellent over the last number of years, with a lot of respect being shown on track for these rare cars whilst still maintaining high level competitive racing :

- NO SWEARING AT THE MARSHALS – they didn't crash your car – you did. It's ok to talk loudly to attract their attention – but don't swear or be aggressive towards them. Remember – you are a marshal too – or will be!!
- If a faster car is coming up to lap you – just move slightly off line - or let them know that you are letting them through. This avoids damage to our precious vintage buggies and allows you, as the slower driver, to learn the lines of the faster driver. Crashing, and taking both of you out, only slows the both of you down.....easier to just be courteous.
- Be ready for your race, the sooner you are ready – the sooner we can start – giving more free time for everyone! We understand that having a chat about the good old days is fun, but we really want to make sure that everyone gets enough racing in. If you intend on entering the maximum 3 classes per day please plan ahead so you have your cars ready and down at the track at the beginning of the round so you can race then marshal and then grab your car ready to race again. We've found we lose a lot of time with people having to run back to their tables to grab the next car etc.
- Please don't be aggressive with your driving or other competitors. We all understand the value of the cars we'll be running, dangerous moves are not worth it.

Most importantly..Have FUN!!!