# **Tasman Grass Kart Club**

**Rule Book** 

2020-2021





# **Tasman Grass Kart Club**

# **New Zealand Grass Kart Rules**

# (TGKC version)

The intention of these rules is to make Grass Kart racing as safe as reasonably practicable. If scrutineers or officials deem a kart to be unsafe, they have the right to require the issues to be fixed before that kart may race. Kart owner have responsibility to confirm the Kart entered in any event is fit for purpose and complies with vehicle safety requirements as outlined in the rules below.

### **KARTS**

### 1. Engines:

Motorcycle production motors only.

Stationary engines, of the correct CC rating are acceptable.

No excessive exhaust noise, 95 dB strictly enforced.

Must be naturally aspirated, (no forced air, turbo etc., No NOS kits)

All karts must have a clutch.

No air cooled engines to exceed 610 cc.

No water cooled engines to exceed 510 cc.

Pit bike engines allowed.

No KT motors of any kind.

Replacement engines must be the same as the original, like for like and be the same cc rating.

The head marshal has the power to pull the head off any motor that is suspected of not being legal cc rating.

The cost of the replacement head gasket is the owner/drivers responsibility.

Any kart found with an oversized engine will result in both the kart and driver being disqualified from the whole meeting.

Karts are restricted to one single cylinder engine.

Juniors & Intermediates 205cc maximum air cooled engine, or 85cc maximum water cooled and p/p engine.

Midget engines 125cc maximum air cooled engines only

No two stroke engines above 75cc allowed for midgets

Stationery engines with centrifugal clutch allowed (cc maximums still apply)

No fuel tanks on top of engines

TGKC only: Track kart engines Rotax 125 but must comply with all other rules and clearances.

### 1a. Liquid cooled

Liquid cooled engines must have a radiator cap and hose clips that function.

Hoses must be in good condition Radiator must be securely mounted behind the seat Radiator overflow tube must discharge below main frame of kart

### 2. Kart Dimensions:

1800mm long x 1350mm wide maximum (bumper to bumper and the outside of the rear wheels).

### 3. Wheels:

Four wheels per kart. No duals. No tyre tampering eg. hand grooving. Steel wheels to have a 6mm bead welded all the way around the wheel. Beads on rims must be flush, and free from sharp edges or burrs No four wheel drive karts.

### 3a. Stub axles

Minimum 15mm diameter at inside bearing, minimum 12mm diameter at outside bearing, front stub axle wheel nuts to be split pin locked or circlips (no R clips) Stub axles must not protrude past outside of tyre or rim Stub axle mounts are to be welded

### 3c. Tyres

See appendix 5

### 4. Brakes:

Must work on both rear wheels only. Brake pedal must be adequate Foot operated only, no more than 40mm of travel at top of pedal

### 4A. Brake Check Method:

Pull the Kart by the brake pedal, rear wheels must lock.

### 4B. Brake cable thickness:

2.0mm Minimum

### 5. Bumpers:

Must not exceed the rear wheel and rim total width.

Must have rounded corners and be adequately constructed.

Can be flush to the outside of the rear wheels but no more than 50mm inside of that line.

Must be a minimum of 100mm deep and vertically up and down (90 deg to the ground) and have at least two vertical bars fitted.

Front bumper must not exceed the inside turning line of either front tyre and have at least two vertical bars fitted.

Rear bumper: minimum of 100mm and maximum of 200mm between top and bottom bar

Bottom bar must be no more than 100 mm off the ground

Must be of round tubular design, with vertical or horizontal bars between top and bottom rails

Must be a minimum of 19x1.2mm round tubing

**Front:** must be of a round tubular design with rounded corners Must be a minimum of 200mm between top and bottom bar, with a minimum of two upright supports

Bottom bar must not be more than 100mm off the ground

Front nose cones are only permitted in midget grade, must not exceed inside turning line of front wheels

### 6. Side Bars:

These are to be constructed of minimum 19mm OD tube, the lower bar must be no more than 130mm from the ground at any point, and no closer than 50mm to the ground. The upper bar must be a minimum of 100mm and maximum of 200mm directly above the lower bar and must meet general kart dimensions (Appendix 1).

Front of bars must be no more than 200mm from the front wheel (with the wheels straight ahead), and no more than 100mm from the back wheel, and must not protrude outside wheels, or be more than 50mm inside wheels. Plastic side pods may be used but must meet all general kart dimensions.

Must not have any sharp edges

### 7. Chain Guard:

- Must be fitted to cover the top of ALL of the drive chain.
- Must continue downwards at the rear to a minimum of the axle centre line and must be able to deflect the chain downwards in the event of a break.
- Joining link must be fitted with open end of clip to the rear at top of sprocket

### 7a. Seat belts

• No seat belts are allowed

### 8. Fuel Tanks and Lines:

- Must be securely mounted and retain fuel from spillage.
- No fuel tanks to be mounted above (over) the engine.
- Fuel shut off valves to be fitted and be accessible on all types of fuel systems.
- Fuel shut off valves can be fitted to the tank or a maximum of 150mm down the supply line from the tank.
- They must be clearly visible.
- Fuel lines must be secured at all joints.
- Fuel breathers or check valves must be fitted and so designed that it completely prevents all spillage.
- Cable ties may be used to clamp fuel lines, but must stop leaks
- No pressurised tanks
- Fuel injected engines must have suitable fuel lines and fittings, refer to head scrutineer if in doubt

### 8A. Fuel:

- Pump or aviation gas only to be used.
- No methanol or alcohol fuels, or octane boosters
- No NOS kits allowed.
- Fuel may be tested at the committees/head scrutineer's discretion

### 9. Kill Switch:

- Must be accessible and CLEARLY IDENTIFIED.
- Must be working.
- Must be mounted on the steering column or on the steering wheel.
- Must be mounted on the steering wheel (CGKC) Must be latching on/off type Must be labelled eg: on/off or push or pull to kill

### 9a. Steering wheel

- Must be complete circle, and of racing type Minimum of 3 x 6mm HT bolts and lock nuts to steering hub
- Steering boss must be tight on steering column, no movement

### 9B. Transponder Location:

• Transponders must be mounted on LH rear seat mount or behind that point.

### 10. Numbers:

- Must be mounted Front, Back, and both sides.
- Minimum character size 150 mm x 65 mm.
- Numbers can be either black numbers on white or white numbers on black.
- Must be cleaned prior to each race.
- Numbers must read horizontally.
- Must adhere to the three digit format, with the club number being the leading digit.
- Class winners can use a YELLOW NUMBER PLATE up to and including the next year's Championship Meeting.

- 0 Southern
- 1 South Canterbury
- 2 Christchurch
- 3 South Otago
- 4 Gore
- 5 500 to 549 Kaikoura 550 to 599 Christchurch
- 6 Green Island
- 7 Cromwell
- 8 Ashburton
- 9 Christchurch

Kart numbers may be sold with karts, however new karts require a new designated number from the club secretary (membership non-transferable)

### 11. Helmets:

- Must be an approved motorcycle helmet. Refer to Appendix 5 for current Helmet Safety Standard list. Must be worn at all times when in the kart.
- Must fit correctly.
- Not damaged, chipped or cracked.
- Will be scrutinized at the same time as the kart.
- Full face helmets are compulsory in all grades TGKC: racing goggles or full face helmets lenses only

### 12. Protective Clothing:

- Suitable protective footwear, eye protection, gloves and overalls (full length and long sleeved) or racing suits must be worn at all times when in the kart.
- Neck braces are compulsory for all classes.
- A minimum of bare skin should be showing.
- All hair must be contained within the helmet or overalls/race suit.
- Will be scrutinized at the same time as the kart.
- TGKC Overalls must be 100% cotton or racing type overalls with a flame retardant lining No clothing to be worn on top of overalls, no loose clothing
- No tear offs, only roll offs (This is to prevent rubbish getting left in the paddock/track)

### 13. Mud Flaps:

- Fitted to the rear bumper, no higher than 20mm off the ground.
- The top of the mud flap must be 25mm higher than the top of the rear wheel.
- Must cover the rear tyre and rim in total width plus a minimum of 5mm either side.
- Any damaged mud flap MUST be replaced or repaired before the next race.
- Mud flaps must be effective but not metal, and be securely attached (not cable ties only)
- Any kart with mud flaps deemed ineffective by the Head Marshall will shown a "ROLLED BLACK FLAG".
- For a second offence that kart will be shown an "OPEN BLACK FLAG".

### 13a. Exhaust System

- Must be inside the back bumper, and inside side bars
- Exhaust outlet must not face to rear of kart ie: bend to deflect flow to ground
- Noise level not to exceed 95dB
- Reading of dB will be taken from 15m inside of track
- Must have a spark arrestor fitted
- Muffler must be fitted, no exceptions

Exhaust repairs on race day must be re-scrutineered.

### 13b. Floorpans

- Front of the floorpan must be secured with either large washers under the floor pan, or be mounted on top
  of the front chassis tabs.
- Must be of suitable non-perforated material, and confined within the main frame, and be parallel to the main frame Lock nuts must be on top of floor (no rivets)
- · Pan must extend from front of seat to forward of the drivers feet
- No part of the bodywork shall be nearer to the ground than the floor pan

### 13c Clutch levers

- Where hand operated clutches are used they must be within 150mm of the steering wheel
- Karts must have a clutch

### 13d Push bars

- Compulsory for all karts
- Minimum of 25 x 1.6mm round tubing, constructed with no sharp ends
- Minimum height of 600mm from top of rear axle

### 13e Kart type

- No radical kart designs are allowed unless approved by the club committee
- No aerodynamic aids are permitted, this will be at the head scrutineers discretion.

### 14. Damaged Karts:

Must be re-scrutinized before racing again.

### 15. Crashes:

- If you spin out or break down on the track remain in the kart with both hands raised until the track is clear and then remove the kart as quickly as possible.
- NOTE: Midgets/Intermediates should remain in their kart with one hand raised, they will be assisted off the
- If you run off the track you must re-enter at the point of exit when the track is clear or safe to do so.
- No unauthorised people on the track
- Hand signals must be used at all times when stopping of leaving the track
- Any kart leaving the track must do so safely, and with consideration to others

### 16. Flags:

- Flag Marshalls must be obeyed at all times.
- Minimum flag size 600 mm x 600 mm.
- No racing shall take place unless all flag marshals are in place.
- Provision of flag marshals is the responsibility of the host club.

Green, Dropped Go

Red, Danger STOP where you are IMMEADIATLEY

Yellow Caution SLOW DOWN and hold position until you have passed the hazard.

NO OVER TAKING.

Black Rolled Warning of an offence. See the Head Marshall at the end of the race

Black Flag Waved Must stop immediately. Further action to be decided by the Head Marshal.

Red/Yellow Extreme Caution. Race stopped temporarily. Proceed to the Start Line with caution.

White Last lap. One further lap to complete to end of race.

Chequered Winning Flag. Finish of race.

### 17. Lights:

- May be used by the host club.
- Must be three lights and a false start light.
- Light sequence must be of random timing.
- Only one green light to be on to signal a start.

### 18. Alcohol:

- No alcohol is to be in the pit area.
- No alcohol is to be consumed before or during the race meeting.
- Drivers are responsible for Pit Crew and Guests behaviour.

### 19. Pits:

- Hosting club to decide whether karts are to be pushed or driven slowly within the pit area.
- No donuts in the pits
- No driving of karts before drivers brief
- No driving of karts during lunch break unless approved by committee
- No smoking in the pits

### 20. Driving:

- Deliberate barging, shunting, weaving or team driving will receive an automatic points deduction, or disqualification from the entire meeting, at the discretion of the Head Marshall.
- All overtaking should be completed without deliberate contact.

### 20a. Overtaking

 Must be done without contact between karts Must be done without either driver being forced off their racing line.

### 21. Abuse:

 Anybody abusing an official or other competitor will be disqualified from All RACING. This includes your Pit Crew and Guests.

### 22. Penalties:

- All penalties will be in the form of a point's deduction. The amount of that deduction is at the discretion of the Head Marshall.
- A minimum of 3 points deduction will be given where hand signals are NOT USED.

### 23. Disputes:

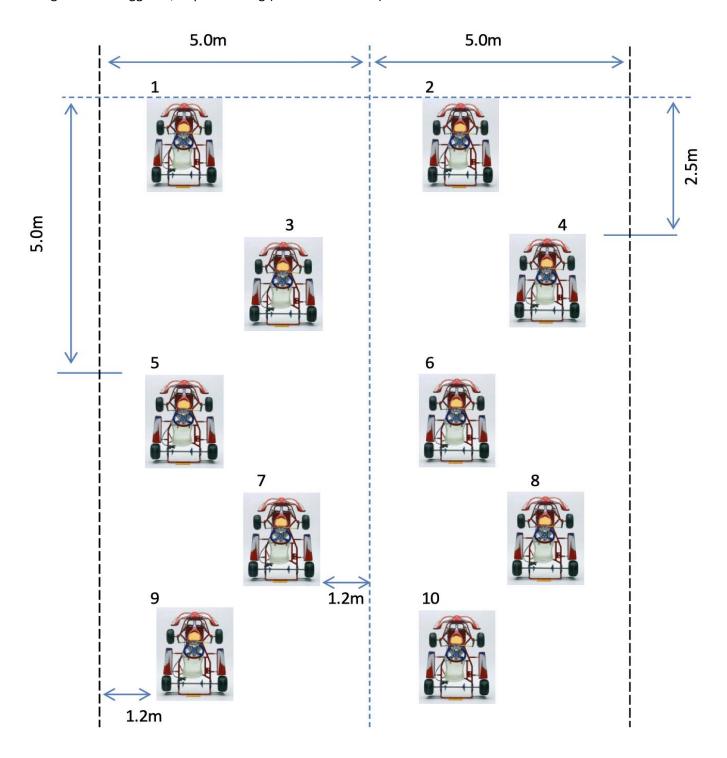
- All disputes must be in writing and contain only the facts of the incident, be signed by the driver and accompanied by \$50.00.
- Disputes must be lodged within 10 minutes of the race concerned finishing and be handed to a nominated person, e.g. Race Secretary, Head Marshall or Host Club President.
- All disputes must be resolved before the next race of those involved is started.
- Each club must have an appointed representative to listen to the Head Marshall and/or the Race Committee's decision.
- The Head Marshall or Race Committee's decision is FINAL.
- Any protest about Lifan engines will be in accordance with Appendix 3 Engine Checks.
- Any protests about engines (Except Lifans) will be put in writing and be accompanied by \$100.00.
- If the engine is found to be legal the owner of that kart, will receive the \$100.00.
- If the engine is not legal (oversize only) the protestor will get the \$100.00.

• All protests to be submitted on the official form with the name of the protestor to be made public at the time of the submission

### 24. Race Starts:

- Standing starts to be used to start all races.
- All karts to be stationary on the grid prior to starting.
- Any kart that jumps the start shall restart with a 20m penalty, a second offence by the same kart will result in that kart being excluded from the race.

Start grid to be staggered, as per drawing (for LH first corner)



- No cones, barriers, grid signs or other obstacles may be placed within the outer edge of the grid area.
- Painted lines on the grass will show the grid positions.
- The dummy grid will replicate the starting grid.
- In a restart due to an accident the grid is to reform as quickly as possible, and no time to be given to refuel or repair karts.
- Any driver requiring medical treatment must have clearance from the head marshal, who takes advice from the medical team, before racing again.
- If any kart has issues (engine or otherwise) once all the karts are lined up on the start grid and ready to start the race, that kart is removed from the grid and the race started.
- The kart may join the race after repairs are carried out.

### 25. Grid Gaps:

• Any gaps in the grid created by the failure of a kart to turn up will remain unfilled and all karts will remain in their drawn positions.

### **26.** Races:

- Shall be six laps in length, except for midgets which will be four laps.
- If there is an incident before the second corner the Head Marshal may restart the race using the original Grid positions.
- If less than one lap has been completed when the race is stopped the race will be restarted using the original grid positions.
- If the race is red flagged after four or more laps have been completed, the Head Marshal may call the race or restart as below.
- If the race is red flagged before four laps are completed, the race will be restarted with a rolling start, Indian file. Positions to be determined by the placing's at the completion of the last full lap.
- No racing will take place unless Flag Marshalls are in place.
- If the amount of racing laps is to reduce then this should be across all grades

### 27. Track:

Length to be a minimum of 600m and a maximum of 800m.

Width to be a minimum of 8m wide.

The starting straight is to be 10m wide minimum to match the starting grid width.

Only after the first corner can the track reduce to 8.0m.

Track to be marked out using 450mm cones (no tyres). Tyres may be used to protect competitors from immovable/solid objects, including fences, pylons, gateways etc.

The race committee or Head Marshall has the right to move all or part of the track as they see fit.

### 28.1 Prizes (For NZ/Club Champs Only):

- Cups/Trophies will be presented from 1st to 3rd place in all grades and certificates from 1st to 6th positions.
- Additionally, all Midgets, Intermediate's, and Juniors, must receive Certificates and a small gift for all competitors.

### 28.2 Champion Club:

- The club with the highest podium ratio will receive the Champion Club trophy.
- Each club will earn podium points for every podium finish that their members achieve.
  - 3 points for first,
  - 2 points for second and
  - 1 point for third.

- The aggregate of all the podium points achieved by a club will then be divided by the total number of kart entries from that club.
- The club with the highest ratio of podium points/entry (podium ratio) is the Champion Club.
- The winning club is to arrange to have their name engraved on the trophy and the trophy is to be returned prior to prizegiving the following year.

### 29. Classes:

- Must be a minimum of 6 Karts to constitute a class.
- If there are two classes of less than 6 karts then these classes may be combined to form one class and race for a Combined Class Trophy.
- Ladies, Midgets, Intermediate and Junior classes are not subject to the minimum entry number rules or combined class rules.

### **Air Cooled Non Power Ported Engines:**

4 Stroke 0 to 205cc

### **Ladies**

0 to 205cc 206 to 510cc (610cc air cooled)

### Lifan

### **Juniors**

(14 to 16 years inclusive as at the 1st of March preceding the Champs)

0 to 205cc maximum (Air cooled engines only) or a

0 to 85cc maximum water cooled and power ported engine.

### **Intermediates**

(9 to 13 years inclusive, as at the 1st of March preceding the Champs)

0 to 205cc maximum (Air cooled engines only) or a

0 to 85cc maximum water cooled and power ported engine.

### Midgets

(5 to 8 years inclusive, as at the 1st of March preceding the Champs)

0 to 125cc maximum (air cooled engines only).

Stationary engines of the correct capacity with a centrifugal clutch.

No 2 stroke engines above 75cc are allowed for Midgets.

Midgets may be run in two classes 0 to 55cc and 56 to 125cc (75cc 2 stroke) air cooled.

### **Water Cooled or Power Ported Engines**

0 to 130cc

206 to 255 cc 2 Stroke

206 to 255 cc 4 Stroke

256 to 510 cc

Only with the approval of the NZ Rules Working Committee can the Hosting Club split the above classes.

### Combined classes to race last on the programme.

If any Grade has five entries or less for five years then this Grade is to either be permanently combined or removed.

### **Super Kart Grade:**

- NZ Grass Kart Rules will apply along with some minor changes
- Senior grade only
- Maximum 510cc W/C or Power Ported 2 and 4 strokes, 0-610cc Air Cooled 2 and 4 strokes
- Race after the last senior race
- To be senior grade only
- Not permitted to compete in the Champions of Champions race or Relay Race
- Refer Appendix 5

### 30. Insurance:

• The host Club must have Public Liability Insurance cover and be able to produce proof of such cover should it be requested by the NZ Rules Working Committee.

### 31. Indemnity:

- ALL DRIVERS, Head Marshall, Flag Marshalls and other Volunteers must sign the indemnity form provided by the Host Club to protect that Club, Ground Owner, Sponsor or Officials from any form of claim.
- Minors under 18 years of age must have a parent or guardian's signature acknowledging the conditions of entry and indemnity.

### 32. Sponsorship:

• If needed, all clubs may be asked to help with sponsorship. It is up to the Host Club, on how this is to work.

### 33. Refuelling:

- NO SMOKING while refuelling karts.
- No person to be seated in the karts during refuelling.

### 34. Batteries:

- If a battery is fitted it must be covered and mounted well away from the fuel tank and/or fuel lines.
- Battery, Starter Motor and Solenoid terminals must be covered.
- No bare wires are to be showing.
- CGKC Rule All batteries to be securely mounted
- CGKC Rule All lead acid batteries to be enclosed in a leak proof container (container to be made of nonconductive materials)

### 35. Hand Signals:

- Hand signals must be used at all times when stopping or leaving the track. This is defined as the ARM FULLY EXTENDED ABOVE THE HELMET.
- Any kart leaving the track, must do so safely and with consideration to others.

### 36. Push Bikes:

- A push bike is only to be used for re starting and after any mishaps during the races for Midgets, Intermediates, Juniors and Ladies competing in the Ladies class only.
- Any other classes that use the push bike to restart, apart from a grid push, shall have their points from that race deducted.

### 37. Parent Help:

- No unauthorised people may be on the circuit.
- A parent/helper is allowed to assist with Midgets, Intermediate's, Juniors and Ladies competing in the Ladies class only.

### 38. Clean Karts:

• Karts must be presented in a clean state for initial scrutineering (not clean, not scrutineered). This includes the underside.

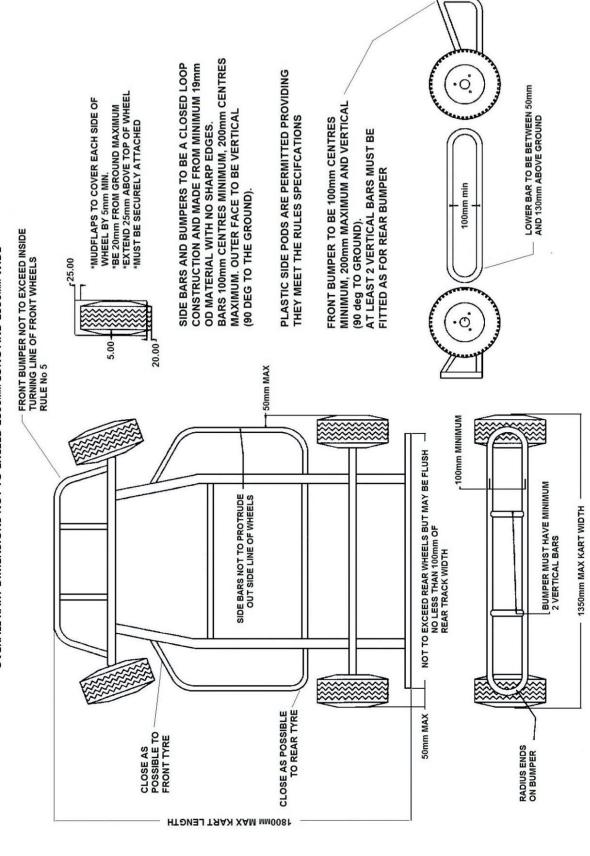
### 39. Grid Draws

• The grid draws in the NZ Rules must be used.

### 40. Eligibility

- All competitors must have completed a minimum of three club race meetings prior to champs.
- This may be over-ridden by the competitor's club committee if they believe the driver is up to race standard for the particular class.
- Juniors can only race in Junior grades.

# OVERALL KART DIMENSIONS NOT TO EXCEED 1800mm LONG AND 1350mm WIDE



100mm min

### Appendix 2

### **New Zealand Grass Kart Championships Race Format**

### Address:

Every club must provide (by 31st August) the following years Hosting Club with the current Club address and contact person's name and phone number to ensure all relevant information may be forwarded on.

### **Entry Forms:**

- These are to be available three months before the race meeting.
- Close off date for entries to be at the Host Clubs discretion.
- Forms to include the Engine make and model for programme inclusion.
- The cost of entry is up to the Host Club.
- Where there are two or more entries submitted by members of the same family, residing at the same address, a decreasing scale of charges should apply.

### **Scrutineering:**

- Scrutineering may be carried out on the day prior to racing if this is suitable to the Host Club.
- Timing to be preferably in the mid to late afternoon.

### **Rules:**

- A current copy of the rules is to be kept on diskette and updated as needed, by a person nominated by the NZ Rules Working Committee.
- A copy will be provided to the Host Club for the purpose of publication and distribution only and must not be altered in any way by the Host Club.

### **Racing Order:**

1.	Ladies	0-205cc
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2. Ladies 206-610cc

3. Intermediates 0-205cc Air Cooled and 0-85 Water cooled and PP

4. Midgets 0-125cc

5. Juniors 0-205cc Air Cooled and 0-85 Water cooled and PP

6. Senior Lifans 200cc only

7. Senior 0-130cc Water cooled and PP.

8. Senior 206-255cc WC and PP 2 Stroke.

9. Senior 256-510cc Water cooled and PP.

10. Senior 0-205cc Air cooled 4 stroke.

11. Senior 206-255cc WC and PP 4 Stroke

12. SuperKart 0 – 510cc (610cc Air cooled)

13. Combined Classes

Only with the approval of the NZ Rules Working Committee can the Hosting Club alter the above racing order.

### **Heats:**

- There will be 6 heats 3 on Saturday and 3 on Sunday.
- All or part of the 4th heat may be run on the Saturday if time permits.
- A maximum of 12 karts in any heat.
- All points from the 6 heats will be accumulated to determine the overall winner of each class.
- If there are karts on equal points after the 6 heats, the winner will be the kart with the most 1st place finishes over the completed races in that class, if this is equal then the most 2nd place finishes over the completed races and so on.
- If there are more than 12 karts in a class, the draw for the heats is to be split so that all drivers have a chance to compete against all others in their class during the 6 heats.

### Lap scoring:

Electronic lap scoring (transponders) must be used.

### Points:

- Points will be based on the number of karts that register in each class ie: if there are 6 karts, then the first kart will get 6 points, and the 2nd kart will get 5 points etc.
- If split heats are used, the total number of karts in the largest heat will be the basis for the scoring for both heats eg: Heat 1 has 10 karts and heat 2 has 7 karts.
- Points for both will start at 10.
- No points for DNF's or karts pushed over the finish line.

### Practice:

- There will be no practice or warm up laps for any class, except the midget class.
- One lap behind the push bike.

### Premature end:

- Should the meeting be prematurely ended due to weather or other adverse conditions, final placing's will be determined on the total points gained from all completed races.
- If required, the count-back system will be used.

### **Champion of Champions:**

- The COC race shall consist of the 1st and 2nd place getters from all classes, except midgets, juniors and intermediates.
- The COC race shall be 10 laps long.
- Grid positions for the COC race will be on a handicap basis.
- Details to be finalised.
- The Head Marshall may use information supplied by the lap timing system.

### **Sunday Relay:**

- This race will be optional depending on time.
- The race will consist of one kart from each class (where available).
- A club may borrow missing class karts and drivers from other clubs.
- The race order will be the same as the main programme, except that midgets will start.
- The number of classes participating may be reduced should time not permit full inclusion.
- The host club must satisfy the present members of the NZ Rules Working Committee that this event can be run safely.

### Officials:

Maximum of four persons -Head Marshall, up to three RWC members, and if required Host club president. Head Marshall: A suitable person that has a good understanding of Grass Karts.

### NZ Rules Working Committee 2019-2020 season are:

Ross Buckland 027 347 0391 janeyandross@gmail.com Richard Brown 021 230 0798 beachfarm@xtra.co.nz John Tielkes 027 270 2321 j.tielkes@xtra.co.nz

- If there are any safety issues these rules may be changed by a unanimous decision of the NZ Rules Working Committee.
- The NZ Rules Working Committee have the right to advise the Host Club if the track/laps etc are not as per the NZ Rules.

### Presidents Meeting:

The Presidents meeting will be held at the racing venue after completion of the last race on Saturday.

### **Rule submissions:**

- These may be submitted up until the 31st May following the Easter race meeting.
- The NZ Rules Working Committee will then meet and consider the submissions.
- They will update the rules where appropriate and will release the new document by 31st October.
- All submissions must be handed, emailed, faxed or posted to any member of the NZ Rules Working Committee.

### Appendix 3: The New Zealand Standard Lifan Grade Rules

All drivers competing in the Lifan grade must abide by the following rules regarding the use of the standard Lifan 163fml engines.

### **General Rules:**

- a. All karts and drivers to comply with all other Grass Kart rules and regulations as set out by the NZ rules working committee.
- b. All engines must be Lifan 163fml model with the following specifications
  - single overhead cam
  - 200cc single cylinder
  - 2 valve head
  - air cooled
  - no balance shaft
  - bore x stroke 63.5 x 62.2 (allowance for wear)
  - 5 speed gearbox
- c. Removed
- d. All engines must be from the Lifan factory
- e. All engines must be standard bore & stroke, allowance for wear given.
- f. No modifications allowed. This includes: No additions to, removal of, alterations to motor (as out of box) that could improve performance.
- g. No after-market or other brand parts to be used.
- h. No machining, i.e.; welding, milling, boring, drilling, planing, turning, grinding, filling, filling, sanding, smoothing, polishing, balancing, lightening, strengthening, blueprinting or aligning of any parts, internal or external. Cam gear mounting holes may however be slotted to bring cam timing to factory specification.
- i. Exhaust tube and muffler inner tube 43mm OD max. Muffler to be "bullet" type only.
- j. Original 163fml carburettor and manifold must be used.
- k. Original 163fml ignition parts to be used i.e.: coil, CDI, ignition, windings or pulse coil.
- I. Starter motor must stay on motor, even if not used.
- m. No dry sump or oil cooler allowed.
- n. Petrol only (maximum 100 octane) no octane boosters, alcohol, methanol or nitro.
- o. These rules do not exclude normal club rules or NZ champ rules.

### Things you can do:

- a. Engine drive sprocket can be changed
- b. Spark plug and cap can be changed with equivalent type
- c. Valves can be lapped in, and valve clearances adjusted
- d. Carburettor jets can be changed or drilled out.
- e. Clamp or brace fitted to secure carburettor
- f. Head exhaust studs can be upsized to 8mm (6mm standard)
- g. Engine mounting holes can be drilled out to 12mm max.
- h. Kick start engine spline can be cut off (internal parts must stay)
- i. Removal of the voltage regulator and the starter solenoid is allowed, if no battery is fitted to the kart (starter motor must stay on engine even if not used).
- j. Any Lifan 163fml engine that does not meet these rules will be disqualified.
- k. Pulse pump (fuel pump) fitting can be added to intake manifold.
- I. Bore may be honed to fit new rings.

### **Engine checks**

- a. Any engine entered in the grade may be checked at the discretion of the Head Marshall.
- b. Engines will be checked at a time and place as requested by the Head Marshall.
- c. Any member may protest an engine, at a cost of \$100 (REF NZ Rule 1).
- d. Engine checks could include rocker cover or head removal or any other checks.
- e. New engines (still in box) unused from the factory may have the serial numbers recorded and be sealed by the hosting club for \$20.00.
- f. Any refusal to allow engine checks to be carried out will be considered to be an illegal/modified engine.

  Any member/competitor found to have an illegal/modified engine will be disqualified and unable to enter std Lifan grade indefinitely.
- g. The protester will also be responsible for the total cost of the inspection, reassembly and return freight should the engine be found to be legal. The kart owner will be responsible for all costs if the engine is found to be illegal. Engine check format is included on the attached protest form.

### Appendix 4

The following 5 tyres make up the control tyres for New Zealand grass kart racing. These are the ONLY tyres permitted in all grades from 1/4/2014

### Control tyre 1

### 13x5.00-6



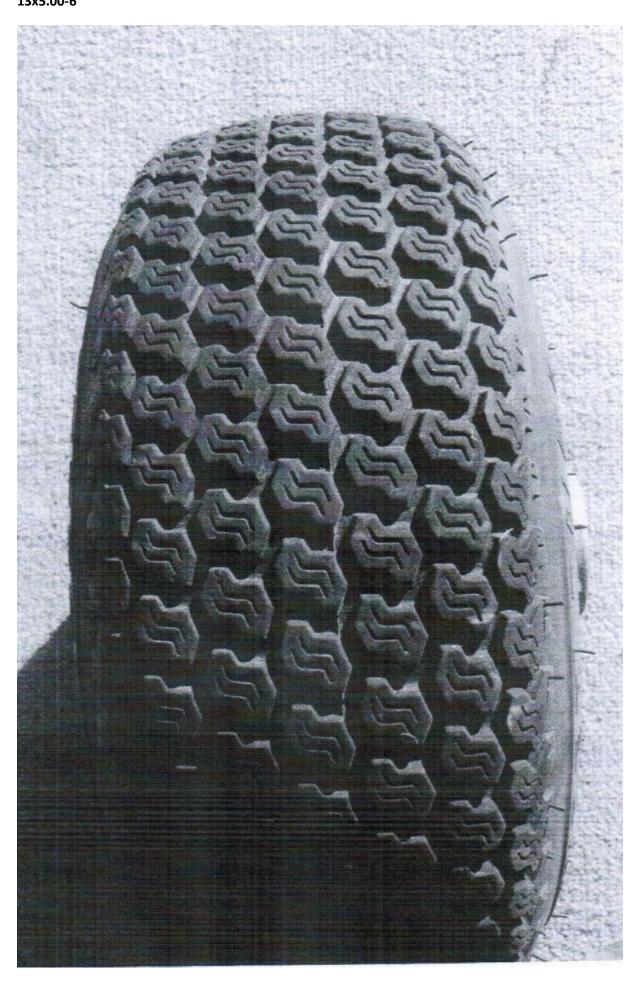


Control tyre 3 & 4

4.10/350-5

4.10/350-6





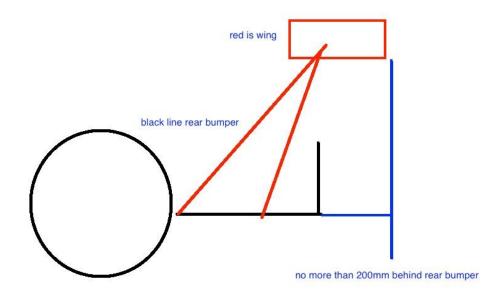
### Appendix 5

### **Super Kart Class**

### **General Rules:**

- a. All karts and drivers to comply with all other Grass Kart rules and regulations as set out by the NZ rules working committee, except those changes as listed below
- b. Maximum Engine size 0-510cc W/C or Power Ported 2 and 4 strokes, 0610cc Air Cooled 2 and 4 strokes
- c. Front brakes can be used
- d. Rear wings may be used with a maximum of 800mm measured from the ground to the highest point of the wing element (not including endcap) Width of wing must not exceed the width of the rear wheels and cannot be any further than 200mm behind the rear bumper
- e. Maximum length 2000mm, Maximum width 1550mm, Maximum height 800mm
- f. Tyres must be of Buris or Hoosier brand
- g. Tire Size Maximum of 12" diameter x 8 1/2" wide
- h. Race order. Will follow the last senior race
- i. Will not be eligible to run in C of C or Combined class races

### Diagram of rear wing



### Appendix 6

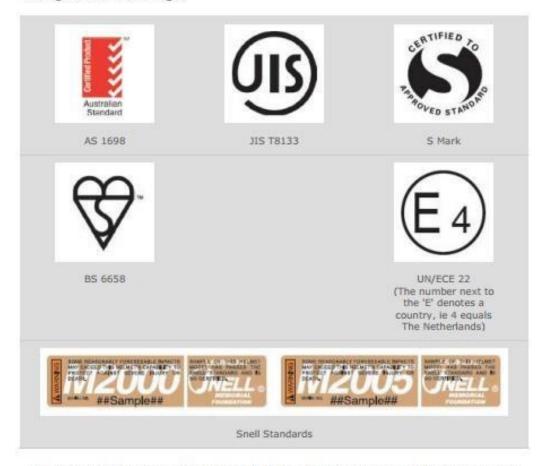
# **Protest: Everything Except Lifan/Shineray Engine** I \_\_\_\_\_ Kart No\_\_\_\_ Class \_\_\_\_ Protest \_\_\_\_\_ Kart No \_\_\_\_ Race \_\_\_\_ Details:\_\_\_\_\_ Fee Pd \$ Witness(es) Action Requested \_\_\_\_\_ Signed \_\_\_\_\_\_ Date & Time \_\_\_\_\_ Protest: Lifan/Shineray Engine Only I \_\_\_\_\_ Kart No\_\_\_\_ Protest \_\_\_\_\_ Kart No \_\_\_\_\_ Select Item(s) to be Checked Bore & Stroke Cam Profile Exhaust Tube Size Cam Timing Carburettor & Manifold Flywheel Weight Ignition **Aftermarket Parts** Inlet & Outlet Ports/Valves **Dry Sump** Witness(es) Fee Pd \$\_\_\_\_\_ Action Requested \_\_\_\_\_ Signed\_\_\_\_\_\_ Date & Time \_\_\_\_\_

### Helmet safety standards

An approved motorcycle helmet is one that complies with one or more of the approved international standards:

- UN/ECE Regulation No. 22: Protective helmets and their visors for drivers and passengers of motorcycles and mopeds (Europe)
- · Australian Standard AS 1698: Protective helmets for vehicle users
- . New Zealand Standard NZS 5430: Protective helmets for vehicle users
- . Snell Memorial Foundation: Helmet Standard for use in motorcycling
- Federal Motor Vehicle Safety Standard No. 218: Motorcycle helmets
- British Standard BS 6658: Specification for protective helmets for vehicle users (for type A helmets only)
- Japan Industrial Standard T8133.

Helmets that comply with approved standards can be identified using these markings:



Helmets complying with FMVSS 218 will be marked with the letters 'DOT'. This standard is only acceptable for motorcycle helmets that have been manufactured and purchased in the United States.