

South Island Grass Kart rules, CGKC additional rules in *italics*

Kart specifications

1. Engines
 - Motorcycle production motors only
 - Stationery engines, of the correct cc rating, are acceptable
 - No excessive exhaust noise, 95db strictly enforced
 - Must be naturally aspirated (no forced air, turbo, no NOS kits)
 - All karts must have a clutch
 - No air cooled engines to exceed 610cc
 - No water cooled engines to exceed 510cc
 - Pit bike engines are now allowed
 - No KT motor of any kind
 - Replacement engines must be the same as the original, like for like and same cc rating
 - The head marshal has the power to pull the head off any motor that is suspected of not being a legal cc rating. The cost of the replacement head gasket is the owner/drivers responsibility
 - Any kart found with an oversize engine will result in both the kart and the 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.*
 - No track kart engines in junior grades (ie KT100, Rotax100, Racket 85)*
 - Midgets engines 0-125cc maximum (air cooled engines only)*
 - Stationery engines with centrifugal clutch*
 - No 2 stroke engines above 75cc allowed for midgets*
 - (no fuel tanks on top of engines)*
- 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 the kart*
2. Dimensions
 - 1800 x 1350 wide maximum (bumper to bumper, outside of 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 and burs*
 - 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 rear wheel and rim width total*
Must have rounded corners and be adequately constructed
Can be flush to the outside of the rear wheels but not less than 50mm per side inside of that line.
Must be a minimum of 100mm deep and vertically up and down (90deg to ground) and have at least 2 vertical bars fitted
Front bumper must not exceed the inside turning line of either front tyre and have at least 2 vertical bars fitted
- Rear: Minimum of 100mm and maximum 200mm between top and bottom bar*
Bottom bar must not be more than 100mm 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 2 upright supports
Bottom bar must not be more than 100mm off the ground
Front nose cones are permitted only in midget grades
6. Side bars *Must start as close as possible at rear of front wheel and finish as close as possible in front of rear wheel.*

These are to be constructed of two parallel 12mm OD bars (minimum) between 100 and 200mm centre to centre apart with nothing protruding outside of rear wheels.

The lower of the two bars must be no more than 50mm above or 50mm below the centre line of both axles

The motor may act as a side bar but there must be bars at the front and rear of the motor

Plastic side pods are also acceptable in place of the above side bars
Check "General Kart Dimensions"

CGKC require a minimum of 19x1.2mm tubing for side bars

Must not have any sharp ends

Must run parallel to front and rear wheel centre line

Must be a closed loop construction, top bar must be directly above bottom bar

Side bars must not protrude outside wheels, and no more than half the width of the tyre to protrude out past side bar

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 and must be able to deflect the chain downwards in the event of a break.

Joining link must be open end to the rear at the top of the 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 valve to be fitted and accessible on all types of fuel systems

Fuel shut off valve 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 they completely prevent 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 No methanol or alcohol fuels, *or octane boosters*
Pump or aviation gas only to be used
No NOS kits allowed

Fuel may be tested at the committees/head scrutineers 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

CGKC: MUST be mounted on the steering wheel
Must be latching on/off type
Must be labelled eg: on/off or push or pull to kill

9a *Steering wheels*

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

10. Numbers Must be mounted front, back and both sides
Minimum character size 150x65mm
Numbers can either be black numbers on white, or white numbers on black
Must be cleaned prior to each race
Numbers must read horizontally

Must adhere to a 3 digit format, with the club number being the leading digit

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

Class winners can use a yellow number plate up to and including the next years championship meeting.

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

11. Helmets Minimum of New Zealand Safety Standard
Must be worn at all times when in the kart
Must fit correctly
Not damaged, chipped or cracked
Will be scrutineered at the same time as the kart.

Full face helmets are compulsory in all grades

12. Protective clothing

Suitable protective footwear, eye protection, gloves and overalls (full length and long sleeved) or racing suits must be worn.

Neck braces are compulsory for all classes

A minimum of bare skin must be showing

All hair must be contained within the helmet or overalls/race suit.

Will be scrutineered at the same time as the kart.

CGKC: racing goggles or full face helmet lenses only

Overalls 100% cotton or kart sport approved only

No clothing to be worn over top of overalls, no loose clothing

All safety gear must be worn at all times while in the kart

13. Mud flaps

Fitted to 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 rigid, but not metal, and be securely attached (not cable ties only)

Any kart whose mudflaps are deemed ineffective by the head marshal, or flag marshal, will receive 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 eg: add bend to deflect flow to the ground

Noise level not to exceed 95dB

Reading of dB will be 15m from inside of track

Must have a spark arrestor fitted

Muffler must be fitted, no exceptions

Exhaust repairs on the day must be re-scrutineered

13b Floor pan

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 the floor pan (not rivets)

Pan must extend from under the seat to forward of the driver's 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 situated within 150mm of the steering wheel

Karts must have clutches

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 scrutineer's discretion.

14. Damaged karts Must be re-scrutineered 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 safe, then remove the kart as quickly as possible

Note: midgets/intermediates should remain in their karts with one hand raised, they will be assisted off the track

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 or leaving the track

Any kart leaving the track must do so safely, and with consideration to others.

16. Flags

Flag marshals must be obeyed at all times

Minimum flag size 600x600mm

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 IMMEDIATELY
Yellow	Caution	SLOW DOWN and hold position until you Have passed the hazard – NO OVERTAKING
Black	Rolled	Warning of an offence See head marshal at end of race
Black	Waved	Must stop immediately

Further action to be decided by head marshal

Red/Yellow	Extreme caution	Race stopped temporarily Proceed to start line with caution
White	Last lap	One further lap to complete to end race
Chequered	Finish of race	Winning flag

17. Lights
May be used by the host club
Must be 3 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 pits*
No driving of karts before drivers brief
No driving of karts during lunch break unless approved by duty team leader
20. Driving
Deliberate barging, shunting, weaving or team driving will receive an automatic points deduction from that race, at the discretion of the head marshal
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 points deduction. The amount of that deduction is at the discretion of the head marshal.
A minimum 3 points deduction will be given where hand signals are not used.
23. Disputes
All disputes must be in writing, containing 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 eg: race secretary, head marshal 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 marshal and/or the race committee's decision.

The head marshal and/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 accompanied by \$100

If the engine is found to be legal (correct size) the owner of that kart will receive the \$100. If the engine is not legal (oversize only) the protestor will get the \$100 back.

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 must be stationery on the grid prior to starting
A kart that breaks the start will restart from at least 20m back from the start line.
A second break, by the same kart, will result in that kart being removed from the race.
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 with one kart length between each kart on the grid (1800mm)
26. Races Shall be 6 laps in length, except for midgets, which will be 4 laps.
If there is an incident, before the second corner, then the head marshal may restart the race, using the original grid positions.
If less than 1 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 4 or more laps have been completed, the head marshal may call the race, or restart as below.
If the race is red flagged before 4 laps are complete, the race will be restarted with a rolling start, indian file. Positions to be determined by the placings at the completion of the last full lap.
No racing will take place unless flag marshals are in place.
27. Track Length to be a minimum of 600m and a maximum of 800m
Width to be a minimum of 8m

The race committee, or head marshall, has the right to move all or part of the track as they see fit.

28. Prizes Cups/trophies will be presented from 1st to 3rd place in all grades, and certificates from 1st to 6th positions.
 Additionally, all midgets, intermediates and juniors, must receive certificates, and a small gift, for all competitors.
29. Classes Must be a minimum of 6 karts to constitute a class, if there are 2 classes of less than 6, then these may be combined to form one class, and race for a combined class trophy.

Air cooled, non-power ported engines

2 stroke
0-190cc
191-510cc

4 stroke
0-205cc
206-266cc
267-510cc

Ladies
0-205cc
206-510cc (610cc air)

Lifan
200cc

Juniors
(14-16 years inclusive, as at 1st March preceding champs)
0-205cc maximum air cooled engine, or 0-85cc maximum water cooled & p/p engine.

Intermediates
(9-13 years inclusive, as at 1st March preceding champs)
0-205cc maximum air cooled engine, or 0-85cc maximum water cooled & p/p engine.

Midgets
(5-8 years inclusive, as at 1st March preceding champs)
0-125cc maximum (air cooled engines only)
Stationery engines of the correct capacity with centrifugal clutch
No 2 stroke engines above 75cc allowed for midgets (*air cooled only*)

Midgets may be split into 2 classes, 0-55cc and 56-125cc (75cc 2 stroke) air cooled

Water cooled or power ported engines

0-130cc

131-205cc

206-255cc

256-510cc

Only with the approval of the SI rules working committee, can the hosting club split the above classes.

30. Insurance The host club must have public liability insurance cover, and be able to provide proof of such cover, should it be requested by the SI rules working committee.
31. Indemnity All drivers, head marshal, flag marshals 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 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 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 all be covered. No bare wires are to be showing.
All batteries are to be securely mounted.
All lead acid batteries to be enclosed in a leak proof container (container to be made of non-conductive materials)
35. Hand signals Hand signals must be used at all times when stopping, or leaving the track. Kart drivers are to extend their hand fully above their head immediately after crossing the finish line.
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 restarting after any mishap, during races for midgets, intermediates, juniors and ladies, competing in the ladies section only.

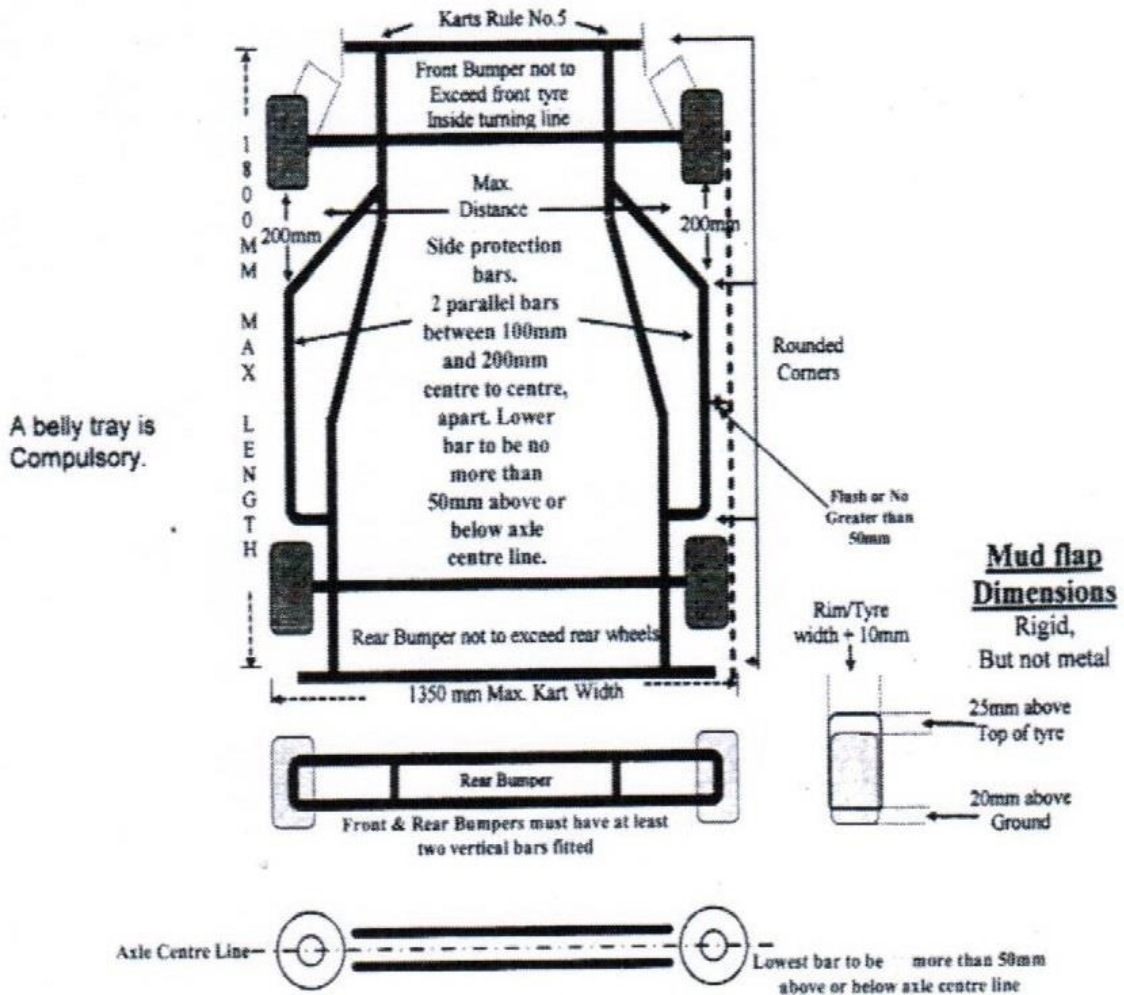
Any other classes that use the push bike to restart, apart from a grid push, shall have their points from that race deducted.

- 37. Parent help No unauthorised people may be on the circuit. A parent/helper is allowed to assist with midgets, intermediates, juniors, and ladies competing in the ladies section only.

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

APPENDIX 1

**General Kart
Dimensions**



Appendix 2

South Island Champs Race Format

Address:

Every club must provide (by the 31st August) the following year's 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 dates for entries to be at the host club's 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 SI 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/206-510cc
Both classes may be run together with handicap

2. Intermediates 0-205cc air cooled and 0-85cc water cooled & p/p

3. Midgets 0-125cc

4. Lifans 200cc

5. Juniors 0-205cc air cooled and 0-85cc water cooled & p/p

6. Senior 0-130cc water cooled & p/p

7. Senior 206-255cc water cooled & p/p

- | | |
|------------|-------------------------------|
| 8. Senior | 256-510cc water cooled & p/p |
| 9. Senior | 206-266cc air cooled 4 stroke |
| 10. Senior | 267-610cc air cooled 4 stroke |
| 11. Senior | 0-205cc air cooled 4 stroke |
| 12. Senior | 191-510cc air cooled 2 stroke |
| 13. Senior | 0-190cc air cooled 2 stroke |
| 14. Senior | 131-205cc water cooled & p/p |

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 determined by the best finishing place in the last heat.

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) may be used at the discretion of the host club.

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 spilt 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 placings 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 8 laps long

Grid positions for the COC race will be on handicap assigned by the head marshal

The head marshal 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 SI rules working committee that this event can be run safely.

Officials:

Maximum of 4 persons – Head marshal, up to three RWC members. And if required host club president.

Head marshal

A suitable person that has a good understanding of grass karts.

SI rules working committee 2012-2013 season

Peter Morgan 027 436 7947

Andy Anderson 027 319 2888

Tom Reid 027 434 0200

rstormreid@yahoo.co.nz

If there are any safety issues, these rules may be changed by a unanimous decision of the SI rules working committee.

Rule submissions:

These may be submitted up until the 31st May following the Easter race meeting.

The SI 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 SI rules working committee.

Appendix 3

The South Island Standard Lifan Grade Rules

All drivers competing in the lifan grade must abide by the following rules regarding the use of the std 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 SI 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
- 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, ie; welding, milling, boring, drilling, planing, turning, grinding, filling, filing, sanding, smoothing, polishing, balancing, lightening, strengthening, blueprinting or aligning of any parts, internal or external.
- 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 ie: coil, CDI, ignition, windings or pulse coil
- l. 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 SI 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.
- l. Bore may be honed to allow new rings to be fitted.

Engine checks

- a. Any engine entered in the grade may be checked at the discretion of the head marshal
- b. Engines will be checked by a third party mutually agreed upon by the committee and the engine owner, at a time and place mutually agreed by both parties.
The kart will be impounded until such time as checks are completed.
- c. Any member may protest an engine, protests must be accompanied by \$500.
If the engine is found to be illegal, the kart will be returned to the owner on payment of costs to the third party who checked the engine. The \$500 is to be returned to the protester.
If the engine is found to be legal, the kart is to be returned to the owner with compensation of costs (maximum \$500), the third party to be paid from the protest fee, and any remaining monies to be returned to the protester.
- 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
- 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.

Appendix 5

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

Control tyre 1

13x5.00-6

11x4.00-5



Control tyre 2

4.00-5



Control tyre 3 & 4

4.10/350-5

4.10/350-6



Control tyre 5

13x5.00-6

