



REGULATIONS AND SPECIFICATIONS FOR THE 2005 NORTHERN REGIONS MOTORCYCLE CIRCUIT RACING CHAMPIONSHIPS

MSA NORTHERN REGIONS MOTORSPORT CIRCULAR NR 3/2005

These regulations are to be read in conjunction with the General Competition Rules (GCR's) and Standing Supplementary Regulations (SSR's) of Motorsport South Africa (MSA). These regulations must be read and understood by all competitors.

1 ELIGIBILITY

1.1 Riders shall be eligible to compete in the relevant class from 1st January of the year in which they turn the required minimum age, unless specified to the contrary in the regulations for a specific class. The competition is open to all riders who hold a current valid National/Regional MSA Competition Licence valid for Motorcycle Circuit Racing. **ONE EVENT LICENCES WILL NOT BE APPLICABLE TO ANY CLASSES.**

2. SUPER MONO CLASS SPECIFICATIONS

- 2.1 Riders are eligible to compete in this class from 1st January of the year in which they turn 14 years of age.
- 2.2 Any single cylinder motorcycle having an engine capacity in excess of 123cc is eligible to compete.
- 2.3 There are no restrictions in respect of modifications, providing the motorcycle complies with MSA GCR's and SSR's (turbo-charging, supercharging or nitrous oxide boosting not permitted).
- 2.4 Any modification to the engine, gearbox, or frame is permitted provided that the MSA safety regulations are adhered to.
- 2.5 Tyres are unrestricted.
- 2.6 Silencers must be fitted to ensure that the motorcycle does not exceed a noise level of 115 dB/A, measured in accordance with GCR 245.
- 2.7 125cc Motorcycles will be scored separately which will count towards a Club Championship.
- 2.8 Competition numbers for 125cc Motorcycles must be **RED on a WHITE** background.

3. SUPERBIKE CLASS SPECIFICATIONS

- 3.1 Riders are eligible to compete in this class from 1st January of the year in which they turn 15 years of age.
- 3.2 There are no restrictions on the permitted modifications in this class providing the motorcycle complies with the MSA GCR's and SSR's (turbo-charging, supercharging or nitrous oxide boosting not permitted).
- 3.3 The minimum capacity for motorcycles in this class is 390cc (four-stroke) or 240cc (two-stroke).
- 3.4 Any modification to the engine, gearbox or frame is permitted provided that the MSA safety regulations are adhered to.
- 3.5 Tyres are unrestricted.
- 3.6 Silencers must be fitted to ensure that the motorcycle does not exceed a noise level of 115 dB/A, measured in accordance with GCR 245.

4. BATTLE OF THE TWINS CLASS SPECIFICATIONS

- 4.1 Riders are eligible to compete in this class from 1st January of the year in which they turn 15 years of age.
- 4.2 There are no restrictions on the permitted modifications in this class providing that the motorcycle complies with the MSA GCR's and SSR's (turbo-charging, supercharging or nitrous oxide boosting not permitted).
- 4.3 Capacity of motorcycles is unlimited. Engines to be twin-cylinder four-stroke.
- 4.4 Any modification to the engine, gearbox or frame is permitted provided that the MSA safety regulations are adhered to.
- 4.5 Tyres are unrestricted.
- 4.6 Silencers must be fitted to ensure that the motorcycle does not exceed a noise level of 115 dB/A, measured in accordance with GCR 245.

5. 600cc SILVER CUP CLASS

Refer to the *Regulations and Specifications for the 2005 South African Motorcycle Road Racing Championship*, as published in the 2005 MSA Handbook.

6. **50cc PRODUCTION CLASS SPECIFICATIONS**

- 6.1 Riders are eligible to compete in this class from 1st January of the year in which they turn 8 years of age up to a maximum of 18 years of age.

“MODIFICATIONS ALLOWED”

- a) In interpreting these regulations, competitors are to note the provisions of GCR 226, which specifies that “**WHAT IS NOT SPECIFICALLY PERMITTED IS DISALLOWED**”.
- b) **TERMS OF REFERENCE –**
Production - Taken to mean a motorcycle, frame, engine or spare part of a 50cc DT, RZ, TZR or TZRR series Yamaha (only) which has been made available for sale to the public at large (inside South Africa), by Yamaha Distributors of South Africa.
Original - Taken to mean that part of a motorcycle that was designed, specified or manufactured by Yamaha to perform a particular task.
Road-going - Taken to mean any 50cc DT, RZ, TZR or TZRR series Yamaha motorcycle offered for sale which, in it's standard form, complies with national road licencing requirements.
Commonly available - Taken to mean any item which may be bought through a retail outlet within the ambit of the MSA Northern Regions Regional Motorsport Committee.
Model of engine (or frame) used - Taken to mean that, where specifically mentioned, (although various engine/frame parts are interchangeable amongst the model ranges permissible, in terms of sizing) the original parts from that engine or frame must be retained and not interchanged. Model of engine or frame is as that designated by Yamaha.
Body parts - Taken to mean those parts appearing under the “Frame” section in an official Yamaha Dealer, spares microfiche
- c) **FRAMES** - Any frame may be used, provided it is derived from a 50cc, **road-going, production** Yamaha. A frame is considered to be made up of frame loop, triple-clamp assembly, footpeg assemblies and swing-arm. Frame dimensions may not be altered or modified. Original fuel tanks as per model of frame must be used. Rear subframes may be modified to carry any seat configuration. Ancillary bracketry may be removed, however frame gusseting may not be removed/modified. For safety reasons footpegs must be of folding or shearpin design.
Road going equipment - All ancillary, original equipment and parts may be removed - wiring looms, electrical equipment and bodyparts. Handlebars may be exchanged for clip-on items.
- d) **SUSPENSION - Front and rear** - Only original forks and shocks may be used and may not be externally modified. Only original internal parts may be used but these may be modified. Simple, internal spring spacers may be added to front forks. Oils are unrestricted.
- e) **TYRES** - Tyres are to be standard, commonly available, road-going items, as imported by a recognised importer. No racing tyres (slick or wet weather) are permitted. Tyres must have a minimum of 1.0mm tread across 75% of the tyre surface.
- f) **WHEELS** - Any original wheel for a 50cc road-going Yamaha may be used. Modifications may not be made.
- g) **BRAKES** - Any configuration of original Yamaha brake parts for a road-going 50cc bike may be used. Braided brake hoses are not permitted. Pad material is unrestricted.
- h) **GEARING** - Any mix of sprockets and chain sizes may be used.
- i) **ENGINE (EXTERNAL)**
Exhaust
Exhaust system (flange, header, expansion chamber, stinger and silencer) is free of restriction, provided it does not exceed a noise level of 115 dB/A, measured in accordance with GCR 245.
Carburettors
Any original carburettor from a Yamaha 50cc road-going model may be used, but may not be modified. Any jet may be used. Slides, nozzles and needles must remain standard. Mounting spigots/reedblocks may not be modified.
Head
Any original head from a Yamaha 50cc, road-going, production model may be used. Modifications are unrestricted. Metal may be added or removed. The head must remain as a one-piece item. Stepping of barrel/head interface is not permitted. Head gaskets may be omitted.
Plugs
Any spark plug may be used.
Ignitions
Any original ignition system (rotor, stator, pick-up, CDI and coil) from a Yamaha 50cc road-going model may be used, but may not be modified. The backing plate may be slotted to alter ignition timing.
Cooling System

Any configuration of original parts from a standard road-going 50cc Yamaha may be used, but these may not be modified. Only pure water may be used as coolant. Thermostats may be omitted. All spigot/hose connections must be adequately secured.

Lubricants

Any lubricants may be used. Sump plugs must be wired to the crankcase to prevent unwinding.

j) ENGINE (INTERNAL) -

Barrels

No addition or removal of metal is allowed except for noted modifications.

- Ports may be chamfered as per the sketch contained in these regulations (see Fig. 1). Re-chamfering may be carried out after reboring.
- Barrels may be skimmed on the upper face only.
- Barrels may be bored to maximum 2mm diameter oversize for TZRR round barrel.
- Base gaskets must conform to the original shape. Material, thickness and quantity are unrestricted.
- Barrel bore surface may be plated.

Pistons

For TZRR round barrel. Any after-market piston which is specified for a 50cc Yamaha road-going production motorcycle and which is commonly available to all competitors, may be used. Piston pins, small ends, and circlips must be standard as per the engine used. No addition or removal of metal is allowed except for those noted below.

- In order to promote piston longevity, the skirt may be chamfered as per the sketch/specifications that form part of these regulations (see Fig. 2).
- Ring landings may not be modified, except to be lightly sanded to relieve scuff-marks due to mechanical failure.
- The piston outer surface may be lightly sanded to relieve scuff-marks due to mechanical failure. Pistons may not be knurled.
- For RZ and TZR barrels: may be bored to a maximum of 43 mm.
- A Kawasaki KX60cc piston for RZ and TZR barrels only.
- The inlet side of the piston skirt may be modified i.e. holes may be machined in the skirt.

Rings

Any after-market rings specified for a 50cc Yamaha road-going, production motorcycle and which are commonly available to all competitors, may be used. Rings may not be modified. A single ring may be used.

Reed Valves

Must be original Yamaha items as per the model of engine used. Neither petals nor reed block may be modified. No spacers may be added.

Cranks and Crankcases

Any combination of original crank/crankcases from a production, road-going Yamaha may be used and may not be modified or gas-flowed. After-market crank seals may be used. A YZ80 big end bearing may replace the standard 50cc item. Crank webs may not be modified. Internal "stuffers" may not be added. Rods and small ends must remain standard as per the model of engine used and may not be modified. Any after-market bearings, which are commonly available, may be used.

Clutch

May not be modified. Must be standard as per model of engine used. Springs must be standard Yamaha items. Commonly available, after-market friction plates may be used. The outer casing may be modified to close up holes left by removing the kick-start and associated assemblies.

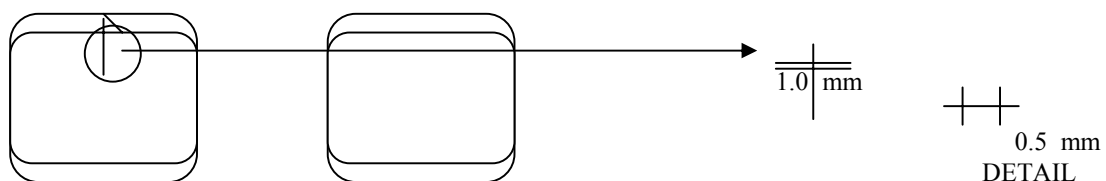
Gearbox

Cluster must be from a standard road-going Yamaha 50cc motorcycle as per model of engine used. No modifications are allowed. Any after-market bearing may be used.

Starter mechanism

The starter mechanism may be removed in its entirety (including the backing plate on the flywheel).

Fig. 1



- Chamfering of Inlet / Exhaust ports only
- Chamfering of Top / Bottom edges only

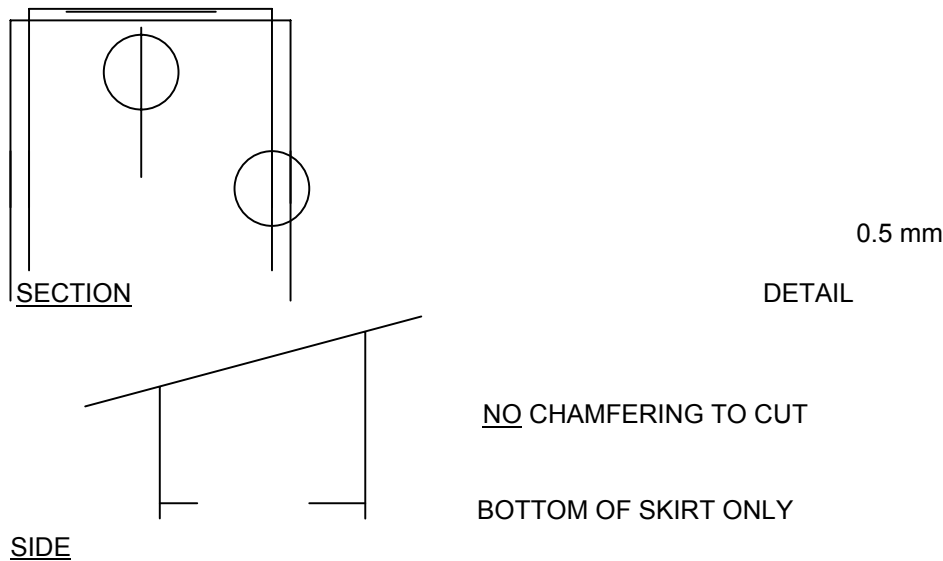


Fig. 2

7. **POWERSPORT CLASS SPECIFICATIONS**

7.1 Riders in this class are eligible to compete as from the 1st January of the year in which they turn 15 years of age.

7.2 In interpreting these regulations competitors are to note the provisions of GCR 226, which specifies as follows:

“WHAT IS NOT SPECIFICALLY PERMITTED IS DISALLOWED”

7.3 **250cc Twin-cylinder (2-Stroke) & 400cc Four-cylinder (4-Stroke)**

- a) Standard road - going production frames are to be used. No after-market or Grand Prix frames are permitted.
- b) Any after-market rear shock absorbers are permitted.
- c) Any standard production road-going forks may be used. Springs, oil and valving is unrestricted. After-market or Grand Prix forks are not permitted.
- d) Any standard production road-going rims may be fitted. Widening of rims is not permitted. After-market or Grand Prix rims are not permitted.
- e) Tyres are to be standard road-going tyres as imported by a recognised importer. Tyres must have a minimum of 1mm tread across 75% of the tyre surface. Slicks are not permitted.
- f) De-restrictor boxes may be used. De-restricting on the speedometer and clocks may be done.
- g) The air box may be removed.
- h) Removal of starting equipment is not permitted. i.e. starter motor, kick starter.
- i) Only standard production carburettors may be used as per the model of motorcycle raced.
- j) Boring of carburettor is permitted to a maximum of 34mm.
- k) The gearbox and clutch must remain standard as per the model of motorcycle raced. There are no restrictions on the friction plates and springs used.
- l) Final gearing is open.
- m) 250cc Twin-cylinder Starter coils, pickups, flywheel and battery must be standard as per model of motorcycle raced.
- n) Any CDI power valve unit may be used.
- o) Wiring harness and charging system must be standard as per model of motorcycle raced. The charging system must be operational at all times.
- p) Radiators are free of restriction.
- q) Footrests/foot controls may be relocated but brackets must be mounted to the frame at the original mounting points.

7.4 **400cc (4-stroke) ENGINES**

- a) Casings are to be standard as per model of motorcycle raced.
- b) Internal machining is unrestricted.
- c) Cranks and conrods are to be standard. Stroking cranks is not permitted.
- d) Camshafts and vernier gears are unrestricted.
- e) Gas flowing is unrestricted.
- f) Material may not be added to the head to facilitate performance modifications.
- g) Compression ratio is open by skimming only.
- h) Any piston may be used but may not be modified.
- i) Charging system and fly wheel may be removed.

7.5 **250cc (2-stroke) ENGINES**

- a) Casings to be standard production as per model of motorcycle raced.
- b) Internal machining is unrestricted.
- c) Cranks must be standard.
- d.) Conrods must be standard production.
- e) Porting is unrestricted.
- f) The heads must be standard production, but may be modified.
- g) Reed blocks are open to modification.
- h) The auto lube system may be removed.
- i) Gearboxes must be standard production as per the model of motorcycle raced.
- j) No Grand Prix components are permitted to be used.
- k) Any piston may be used but may not be modified.

8. CLASSIC SUPERBIKE SPECIFICATIONS

- 8.1 The silhouette of the motorcycle must be maintained.
- 8.2 The maximum engine capacity allowed in this class will be 1110cc.
- 8.3 Any other engine modifications are allowed, e.g. cams, gas-flowing, etc.
- 8.4 Oil coolers are allowed.
- 8.5 Exhausts can be modified or changed.
- 8.6 Carburettors must be the original size and type (no flat slide or electrons). Air cleaners/filters may be changed or removed.
- 8.7 The original rim diameter must be used. A maximum tyre width of 130 is permissible on a maximum rim width of 3½ inches. The original brakes (which include the master cylinders/callipers/discs and drums) are to be used. Remote reservoirs may be fitted. Any type of brake pads may be used.
- 8.8 No slicks or tyre warmers are permitted. Only locally used rubber may be used.
- 8.9 Braided hoses can be fitted.
- 8.10 Original forks, yolks and swinging arm are to be used.
- 8.11 The swinging arm and frame may be braced or reinforced. Fork bracing is permitted.
- 8.12 After market rear shock absorbers can be used as long as they are from the period.
- 8.13 Chains and sprockets are open and may be changed from 630 to a 530, etc.
- 8.14 Foot peg mountings and gear linkages are free to be altered to suit riding style.
- 8.15 Alternators, starter motors and batteries may be removed or changed.
- 8.16 Original ignitions are to be used. Headlights, indicators and superfluous wiring, etc. may be removed.
- 8.17 Series engine/frame combinations must be used.
- 8.18 Any handlebars can be used as long as they are deemed to be safe and from the period.
- 8.19 The original seat must be retained, but the padding can be shaped to suit the rider.
- 8.20 Steering dampers may be used.
- 8.21 No mono-shock motorcycles are eligible unless the machines were equipped with such when the machine was manufactured and complies with period.
- 8.22 In the spirit of Classic racing the bore and stroke of the machine are to appear on the engine so as to determine the capacity without stripping the motor. Furthermore, if a transgression is visibly noticeable, it should be drawn to the attention of the Technical Committee prior to racing commencing.

9. DERBI CLASS – CLUB CLASS ONLY

- 9.1 Bikes shall be supplied and delivered to each race on behalf of the participants.
- 9.2 All entry fees for the races making up the series are included in the “package price” for the series and shall therefore be paid by Derbi S.A.
- 9.3 The bikes remain with Derbi S.A. and all maintenance for the duration of the series rests with Derbi S.A. This includes breakages, seizures, tyres, brake pads, petrol etc. Tyres shall be replaced as and when required.
- 9.4 The maintenance provided by Derbi S.A. as part of the package excludes the cost of repairs as a result of accident/incident damage. The cost of the repairs for any such damage, which shall be undertaken by Derbi, shall be for the owners’ account. Derbi S.A. shall however undertake to repair accident/incident damage at dealer cost levels. The definition of accident/incident damage shall be at the sole discretion of Derbi S.A. (in consultation with the MSA Technical Consultant for motorcycle racing) and their decision will be final. Where accident/incident damage has been sustained, Derbi S.A. shall provide a written quote for the repairs within 72 hours. Should the owner of the motorcycle not dispute this quote within a further 48 hours, it will be deemed to have been accepted, the motorcycle shall be repaired and the owner shall be liable for the cost of the repairs. Any disputes regarding quotes for repairs shall be referred to the MSA Technical Consultant, whose decision shall be final.
- 9.5 All bikes will be maintained in standard trim.
- 9.6 Participants in the series shall, at random, draw a key engraved with the number of a motorcycle out of a hat, and race that bike at the race in question. This is to ensure fair and equal machinery between the participants.

- 9.7 At the end of the season the participant can keep or resell the bike he originally purchased, if he so wishes. Bikes may not, however, be raced in the series for more than one season.
- 9.8 Participants in the series are welcome to secure individual sponsors for themselves.
- 9.9 After-market fairings (fibreglass) will be supplied by Derbi S.A.
Riders shall be eligible to compete in the series from 01 January of the year in which they turn 9, until 31 December of the year in which they turn 17 years of age.
- 9.10 If a participant withdraws from the series for whatsoever reason, he shall forfeit all right save for Derbi S.A. shall only be responsible for the series run in the Northern Regions and shall not assume any responsibility for any other regions in the country. However, it is anticipated that sponsors WILL be found and that other regions will also run similar series under the auspices of MSA and Derbi S.A.
- 9.11 A participant that has not paid the costs of accident/incident repairs shall not be permitted to take any further part in the series until such time as he/she has done so. Should a participant refuse to pay for repairs undertaken by Derbi S.A, he/she may take possession of the damaged motorcycle and shall be precluded from any further participation in the series.
- 9.12 Non-essential parts for racing will be removed in order to save costs. These parts will be given to the participant at the end of the series, or when the participant will no longer be taking part in the series for whatever reason. Where parts have been exchanged for after-market products for racing purposes (e.g. fairings), the original parts shall be returned to the participant in exchange for the after-market parts, either at the end of the series or once the participant has withdrawn from the series for whatever reason.
- 9.13 Any participant involved in a racing incident or accident will be allowed to resume competing at the sole discretion of the Clerk of the Course and/or Chief Medical Officer.
- 9.14 Practice days, if possible, may be organised at the sole discretion of Derbi S.A., subject to at least 55% of participants taking part at their own cost.
- 9.15 All motorcycles to be used in the series must be purchased from Derbi S.A. or its appointed agents.
- 9.16 MSA will allocate competition number on application to riders, valid for the duration of the series. Numbers shall be allocated on a first-come-first-serve basis and will start at 10. No triple-digit numbers shall be permitted.
- 9.17 The bodywork of all motorcycles being used in the series will be painted by Derbi S.A., with space being provided for each participant's individual sponsors' decals. Said decals are to be provided by each participant at his/her cost, and attached on a race-by-race basis.
- 9.18 No modifications will be permitted to motorcycles, save for the adjustment of tyre pressures, suspension adjustments and the repositioning of brake and clutch controls.
- 9.19 Race fairings and other "racing" parts are to be returned to Derbi S.A. at the end of the racing season.
- 9.20 Derbi S.A. will provide a bike for the use of a development rider nominated by MSA at all rounds of the series, but shall retain ownership of the bike so provided.
- 9.21 ***A Minimum of a current MSA Club Licence valid for Motorcycle Circuit Racing will be applicable to compete in this class.***
- 10. HEATS TO COUNT**
- 10.1 Should less than 50%, plus one, of the scheduled heats making up the championship be run or scored, no champion will be declared in the relevant class/es. Refer to GCR 234 (ii).
- 10.2 The points from all heats held will count towards the final championship standings, i.e. no points will be dropped.
- 11. RACE DISTANCE**
- 11.1. Each championship class will run a minimum of 30km at each race meeting, to be run in two or three equal heats.
- 12. CHANGE OF COMPONENTS**
- 12.1 A competitor may change any part/s on his/her motorcycle between heats.
- 12.2 Where a competitor wishes to change motorcycles between heats, he may do so provided:
- The Clerk of the Course is advised of this intention at least 10 minutes prior to the start of the next heat.
 - The motorcycle has been passed by the scrutineers.
- c) The competitor "**Uses the same competition number as he originally entered on for the day**".
- d) The competitor starts from the back of the grid irrespective of his finishing position in the previous heat.
- 13. SCRUTINEERING**
- 13.1 Motorcycles must be presented for scrutiny in a clean race-worthy condition, together with approved crash helmet and protective clothing, all in good condition.
- 13.2 No open-ended pipe in any way connected with the lubrication or cooling system, sump, catch tank or other oil or water reservoir, is permitted. All such pipes must terminate in a plastic or metal container of adequate capacity firmly secured to the motorcycle and acceptable to the scrutineers at pre-race scrutiny. All such containers must be empty at the start of any race.
- 13.3 Gearbox and engine drain plugs and oil filter retaining bolts must be wire-locked. Canister-type oil filter bodies must be clamped.
- 13.4 At any time during an event, silencers may be checked for noise levels in accordance with GCR 245.

13.5 No motorcycle may compete with ethylene glycol (anti-freeze) in the cooling system.

14. FUEL

14.1 Refer GCR 240 in the 2004 MSA Handbook.

15. GRID POSITIONS

15.1 Grid positions for the first heat will be determined according to the current championship points log. Grid positions for non-points holders will be determined in accordance with competition numbers, in ascending order. Competitors who enter after the closing date for entries listed in the event SR's shall start from the back of the grid. In the event of their being more than one such competitor, the order between them shall be at the sole discretion of the clerk of the course.

15.2 Grid positions for heats 2 and 3 (the latter where applicable) will be according to the finishing positions in heats 1 and 2 respectively.

15.3 **Starting positions for the 600 Silver Cup Class ONLY will be based on times attained in the Official Qualifying Session. For Heats 2/3 (the latter where applicable) will be according to the finishing positions attained in heat 1 and 2 respectively.**

16. STARTING PROCEDURE

16.1 Riders will be lined up in their respective grid positions in the pre-race paddock.

16.2 Access to the pre-race paddock will close **5 MINUTES** before the start time of that race. Any competitor failing to enter the pre-race paddock before it is closed, **will not be permitted to enter and will have to start his/her race from the Pit Lane. Refer to SSR 38.**

Starting positions are to be maintained during the warm up lap/s. Any competitor not maintaining his/her starting position will automatically start at the back of the grid.

16.3 After completing the warm up laps as indicated, they will form up on the starting grid with engines running.

16.4 When the starter is satisfied that the starting grid is properly made up, he will display a 30-second signal.

17.5 The starting signal will be in accordance with SSR 38 - Motorcycles.

17. POINTS SCORING

17.1 Points towards the Championship will be scored per heat, with all heats to count, on the following basis:

1st	20 points	6th	10 points	11th	5 points
2nd	17 points	7th	9 points	12th	4 points
3rd	15 points	8th	8 points	13th	3 points
4th	12 points	9th	7 points	14th	2 points
5th	11 points	10th	6 points	15th	1 point

17.2 There shall be not less than six (6) starters per class for that class to score towards the championship. To be classified as a starter a competitor must participate in at least one official practice session, as per the SR's for the event, and/or participate in the race/event itself. Refer to GCR 230/266.

17.3 Overall positions for the day will be determined on the basis of points scored for the separate heats.

A tie in points will be resolved in favour of the competitor with the greater number of firsts, failing this seconds or thirds, etc. If a tie still remains, it will be resolved in favour of the competitor with the best finishing position in the final heat.

17.4 A competitor who jumps the start will be **PENALISED 10 POINTS** from the heat concerned.

18. SEPARATION OF TIES - OVERALL

18.1 A tie at the end of the season will be resolved in favour of the competitor having the greater number of heat wins. If the tie is not resolved then the greater number of seconds will count, failing this thirds and so on. If this is still not effective the MSA Northern Regions Motorsport Committee shall declare the winner on such basis as it deems appropriate.

19. DECLARATION OF CHAMPIONS

19.1 The MSA Northern Regions Motorsport Committee, at its sole discretion, shall declare the winners of the various championship classes.

20. AIM OF THE CHAMPIONSHIP

20.1 To declare a Northern Regions Motorsport Champion in each of the 50cc Highschool, Super Mono, Superbike, Powersport 250, Battle of the Twins, 600cc Silver Cup and Classic Classes.

21. CONTROLLERS OF THE CHAMPIONSHIP

21.1 The Controllers of the Championship shall be the MSA Northern Regions Motorsport Committee.

22. COMPETITION NUMBERS

22.1 Competition numbers for all classes will be those as issued by Motorsport S.A (Head Office) only.

NUMBERS MUST BE OF AN ARIAL TYPE FONT AND A MINIMUM OF 150mm HIGH