



English Superkart Championships

“E”

an MSA Nations Plate





SPECIFIC REGULATIONS

2017 ENGLISH SUPERKART CHAMPIONSHIPS



1.0 SPORTING REGULATIONS - GENERAL

The English Superkart Championship is administered jointly by The British Superkart Racing Club and Superkarting UK in accordance with the General Regulations of the Royal Automobile Club Motor Sport Association (incorporating the provisions of the International Sporting Code of the FIA), the sporting regulations below and these Championship Regulations.

Championship No. CH2017/K006

MSA Championship Grade: B

1.1 START PRECEDURE - The grid formation will be 2 x 2 Line astern with karts one behind the other (not staggered but in line). The pole man will lead the way.

All starts will be slow rolling starts following a green flag lap in grid positions behind the pace car.

The race will begin at the going out of the start light until then breaking formation is forbidden.

Any drivers unable to start the green flag lap or take the start are required to indicate their situation. Any driver unable to maintain grid position on the green flag lap, to the extent that all the other karts are ahead of them, may complete the lap but must remain at the rear without overtaking. Gaps on the grid will not be filled and competitors must maintain their allocated position.

The green flag lap will be controlled by the pace car.

During the pace lap(s) drivers are to respect the position of the other drivers around them, remain in their assigned row and not encroach on their position. At the end of the lap (s) the pace car will pull into the pit lane and the driver leading the field is responsible for maintaining the speed established by the pace car until lights/flag out.

All karts should be in perfect formation as soon as is practically possible and must be in position at the completion of 50% of the final pace lap (s) unless stated otherwise in event SR's or Final Instructions. The competitor occupying pole position is responsible for setting the distance behind the pace car at the completion of 50% of the final pace lap(s) of approximately 30 metres.

The pace car observer will indicate if the distance is incorrect. The driver on the outside front row will draw level with the driver on pole. All following vehicles will line up neatly two by two, line astern, between 2 and 3 metres behind the kart in front of them. Karts must maintain their grid positions at the speed determined by the lead kart.

Falling back in order to accelerate is prohibited. Excessive weaving is prohibited and all weaving should stop at the completion of 50% of the final green flag lap (s).

A go for race start will be indicated by the lights out on the pace car prior to pulling of the circuit,

Upon successful completion of the green flag lap(s) the pace car will retire to its designated pull-off point and the race karts will proceed, maintaining constant speed and formation until the signal is given by the starter that the race shall begin.

The Clerk of the Course will communicate with the start line officials, in order that the start maybe given ,or karts will be brought to a halt on the grid by showing of the red flag for the race to be restarted.

Once the signal to start racing is given, only then, may karts break formation and overtake prior to the start/finish line.

Any breaches of the start procedure may give rise to penalties under the current MSA Kart penalty system. i.e. gaining an unfair advantage

The Chief Clerk at his discretion may direct that when the starting signal is given no kart may overtake another until they have crossed the start line.

1.1.2 PRACTICE & RACE STOPS - Any practice/race can be stopped at the sole discretion of the Clerk of the Course by waving the Red flag at the Start/Finish line. Competitors will be warned that the race has been stopped by the simultaneous waving of the Red flag at all Flag Marshalling Posts.

All competitors should slow down and return to the re-assembly point, which will be the start/finish line unless otherwise designated in the Final Instructions. This area will automatically be considered PARC FERME until such time as the Clerk of the Course announces that Parc Ferme conditions are lifted. In qualifying/practice the Parc Ferme rules will be lifted and all competitors will be allowed to continue with the qualifying/practice session assuming their kart is safe to do so.

Any race stopped before the leader has completed two laps will be declared a "No Contest" and available karts will restart from their original grid positions. Refueling will only be allowed in the pit lane

Any race stopped after the leader has completed more than two laps but less than 75% of its duration will be considered as the first part of a two part race. Karts will be restarted from a grid set out in the finishing order, which shall be based upon the order of crossing the finish line at one lap less than at the time of first showing the Red Flag. Only karts which are under their own power at the showing of the Red Flag will be classified. The result will be the order of finishing at the end of the restarted race, unless Championship Regulations specify otherwise. The result will list all competitors who took the start in the race even if they did not take part in the restarted race and will use the first part for purposes of establishing lap records and point scoring where applicable. Any issues for any class in a Championship will be determined from the initial grid not the grid for the restarted race.

Any race stopped after the leader has completed 75% of its duration may be considered to have finished, unless the Clerk of the Course, in consultation with the Stewards of the Meeting, deems it appropriate to restart the race. If not restarted the result will be based on the order of crossing the finish line at one lap less than at the time of the first showing of the Red Flag. Only karts which are under their own power at the showing of the Red Flag will be classified. If run as a two part race 5.4.2 will apply.

In the interval between stopping and restarting the race cars may return to the pit area for repairs. They may join from the pit road after all the other cars have started. Non-runners at the time of stopping can restart from the pit lane behind those referred to above. No work may be carried out on the grid unless on grounds of safety and with the approval of the scrutineer. The Clerk of the Course may order that the duration of the second part or re-run of any race shall be of a shorter distance than originally scheduled, or may be abandoned altogether

If during any race no kart crosses the start/finish line under its own power during a period of five minutes the end of race signal shall be displayed and the results announced on the relative positions of cars at the time they last crossed the control line under their own

It is an offence to break formation before crossing the line on the rolling lap and may result in the offender being penalized in accordance with the series regulations. The penalty will be applied at the end of the race.

Such penalties will not occur or be recorded on the competition licence record.

Once Parc Ferme restrictions are lifted, the pace car will be positioned at the head of the Parc Ferme Grid. The Pace Car will then leave when told to begin the restart procedure. There will be a period NOT EXCEEDING FIVE MINUTES between the lifting of restrictions and the departure of the Pace Car. At this point pushers will be allowed to take up their positions. Any competitor who is not able to get going at the restart will have to leave the circuit into the assembly area/pit lane and if able, rejoin under supervision at the back of the grid once the race has started

1.1.3 MAINTENANCE TO KARTS DURING RACE, PRACTICE OR QUALIFYING. Should a kart require work to be carried out on it during a race, practice or qualifying session it MUST be done in the pit lane. Once a kart has been taken back to the paddock area it will be deemed to have retired from the session and will not be permitted back out.

1.2 OFFICIALS

The Championship will be organised jointly by the British Superkart Racing Club and Superkarting UK Officials will have not less than a National A Licence status at senior level posts. The permit for each event will be National 'B' unless stated otherwise in the Event SR's.

Series Technical Commissioner - Ernie Salmon

Series Co-ordinator Ian Rushforth

CHAMPIONSHIP STEWARDS.

Ken Walker - Mike Bernie - Chris Drake

MSA KARTING TRIAL OF CIK-FIA JUDICIAL PROCEDURES

The Motor Sports Council has agreed that a limited trial of the CIK-FIA system of judicial procedures will be undertaken and evaluated. This meeting is one of those selected to form part of that trial.

The judicial procedures to be applied at this meeting will therefore be as follows:

1. All judicial decisions will be taken by the Stewards of the Meeting, not the Clerk of the Course.
2. The Clerk of the Course will, as usual, have full responsibility for the running and conduct of the meeting in accordance with the regulations. This includes the control of practice, heats and races, adherence to the timetable, the starting procedure and the stopping or suspending and restarting of races.
3. The Clerk of the Course will refer any incidents or possible breaches of the regulations to the Stewards of the Meeting, who will be responsible for investigating these and, if they deem it appropriate, imposing any penalties. The decision to show the black flag to any competitor will also rest solely with the Stewards of the Meeting, having considered a request from the Clerk of the Course.
4. The penalties to be applied by the Stewards of the Meeting will be in line with the MSA's mandatory karting penalties (as revised from time to time— see attached).
5. Any protests must be lodged as usual in accordance with C5.1.2 but they will be heard and adjudicated on by the Stewards of the Meeting, not the Clerk of the Course. The usual time limits as per C5.2 and the usual protest fees as per Appendix 1 Article 13.1 will apply.
6. Any appeals against decisions of the Stewards of the Meeting will be heard as usual by the National Court (but note article 7 below). The usual process and time limits as per C7.1 will apply, with the exception of removal of the restriction on grounds for appeal at C7.1.3. Any Eligibility Appeal must be submitted as usual in accordance with C7.2. The usual appeal fees to the National Court set out in Appendix 1 Article 13.4 will apply.
7. For the purposes of this trial, Motor Sports Council has agreed that any time, place or lap penalty imposed by the Stewards of the Meeting shall not be subject to appeal. Also, in accordance with C2.6.2, where the Stewards of the Meeting are satisfied that a physical assault or threat of physical assault has occurred, then no appeal against their sentence will be allowed.
8. Motor Sports Council has also agreed that, as a safeguard, if a competitor lodges a valid appeal (excluding the cases cited in article 9 below) the penalty will be suspended for the duration of the meeting. However, the suspensive affect resulting from the appeal does not allow the competitor to take part in the prize-giving or the podium ceremony, nor to appear in the official classification of the competition in any place other than that resulting from the application of the penalty. The rights of the competitor will be re-established if they win their appeal before the National Court, unless this is not possible due to passage of time.
9. The decision of the Stewards of the Meeting will become immediately binding notwithstanding an appeal if it concerns questions of safety (e.g. extreme breaches of C1.1.5. justifying a 30 day licence suspension), good standing (e.g. physical assault or threat of) or irregularity of entry by a competitor (e.g. fraudulent entry) or when, in the course of the same meeting, a further breach is committed justifying the exclusion of the same competitor. The decision of the Stewards must mention the existence of cases above that justify the decision being enforceable notwithstanding the appeal.

For the purposes of this trial, and in so far as it is necessary, the following regulations are varied by the authority of the Motor Sports Council (in accordance with A2.5) as required to facilitate the undertaking of this judicial procedures trial at this meeting:

(a) Regulations relating to the Clerk of the Course judicial role:

C2.3, C2.3.2, C2.3.4, C2.4, C2.5, C3.1.1, C3.2, C3.3, C5.1.1, C5.2.3, C5.3.5, C5.3.5.2, C5.4, C5.4.1, C5.6;

(b) Regulations relating to the Clerk of the Course powers and responsibilities: G5.2.18, G5.3, G5.3.1, G5.3.2, G5.3.3, G5.3.5, G5.3.6, G5.3.7, G5.3.8, G.5.3.10;

(c) Regulations regarding the Stewards of the Meeting role as an appeal body: C6.1 to C6.6 (with the exception of C6.5), G7.2.5;

(d) Regulations regarding the Stewards of the Meeting powers and responsibilities: G2.4, G2.4.3;

(e) Regulations regarding appeals to the National Court: C7.1.3, C7.3.1;

(f) Other relevant provisions:

1.3 COMPETITOR ELIGIBILITY

- 1.3.1** Entrants must be fully paid up valid membership card holding members of the The British Superkart Racing Club and/or Superkarting UK and in possession of a valid 2017 MSA Entrants Licences. Competitors under the age of 18 must be accompanied by the holder of a PG Entrant's licence who must sign on as Entrant of that competitor.
- 1.3.2** Drivers and Entrant/Drivers must be fully paid up valid membership card holding members of The British Superkart Racing Club and Superkarting UK and in possession of a licence issued by the MSA or as per H26.1.5 & H26.2.1b. Minimum Required is Kart National B Novice unless stated otherwise in the event SR's
- 1.3.3** Only drivers complying with the regulations are eligible to score points
- 1.3.4** A competitor who has a Kart National A or B licence but has competed only on short circuits will be considered as a novice and carry a novice plate, until he/she has received 4 signatures from an MSA Steward for competing on long circuit. A novice plate will consist of a yellow plate 22cm x 22cm with a black diagonal cross with strokes 15cm x 2.5cm
- 1.4** Post race checks - will include weight, engine type, noise and chassis eligibility and will be at the discretion of the C of C and/or Chief Scrutineer. Drivers must present themselves for weighing after each race or practice. All drivers must report to Parc Ferme after the race has finished even if they have been recovered by a recovery vehicle
- 1.5** The two member clubs will acknowledge the GP and 0 number plates which recognises the British Superkart Grand Prix winner (GP), UK Cup winner (0), and the top ten finishers in the MSA British and BSA National Championships.
The winner of each class Championship will be awarded an "E" number plate.
- 1.6** Only karts which have covered at least 80% of the distance covered by the class winner and which cross the finishing line under their own power within 4 minutes of the overall winner will be classified.
- 1.7** The starting grids for the first race of an event will be formed by the results of timed qualifying. The Race 2 grid will be formed by the drivers fastest lap from Race 1 and so on. Unless otherwise stated in the event SR's
At all races including those where different classes are racing together the starts will be signaled by a single light or flag i.e all together using one signal regardless of class
- 1.8 ELIGIBLE DRIVERS**
- 1.8.1** In order to score points in the English Superkart Championship it is necessary to join one of the two clubs and make an official entry. A minimum of 10 drivers will constitute a Championship.
Race Nos. will be the organisers responsibility
The places at each of the events will be first come first served but in the event that an entry is oversubscribed the following criteria will be used to decide priority - Order of receipt by post unless otherwise stated in event SR's
- 1.8.2** In all cases the entry must have been received by the stated close of entry
- 1.8.3** Entry fees will be paid direct to the organising club at the rate notified on the club entry form. Dishonoured cheques will be reported to the MSA and licences may be suspended.
- 1.8.4** Each event should have at least 2 races. Race distance will be a minimum of 12 minutes. Force Majeure may be the reason for less than minimum. In a case where Force Majeure changes or cancels an event, organisers will be due all fees.
The starting grids for the first race of an event will be formed by the results of timed qualifying. The Race 2 grid will be formed by the drivers fastest lap from Race 1 and so on. Unless otherwise stated in the event SR's
All non finishers of the first race will be allowed to race in the second race at the discretion of the Clerk of the Course.
- 1.8.5** It is a requirement that all karts must have a transponder fitted and working at ALL times the vehicle is on the track. Failure to do so WILL result in the driver not receiving a time or race finish

2.0 SCORING

- 2.0.1** Points will be awarded to the first 20 finishers in each class per race as follows :- 40,35,32,30,28,26,24,22,20,18,16,14,12,10,8,6,5,4,3,2 and 1 Point to all finishers.
- 2.0.2** In the event of a tie in points between two or more drivers the better-discarded results will be counted to resolve it. If a tie still exists the number of best places will be counted. Should neither of these methods be effective the driver who beats the most people will win i.e. total number of starters in qualifying events count for each driver involved in the tie, if still not resolved a count back of people beaten in each driver discarded rounds to count. Should none of these methods be effective the Championship will be decided by a method specified by organising clubs.
- 2.0.3** A results and information service will operate at all events and be available to all drivers from club marquee or race admin. office. Updated points and results from each round will be posted at the start of all Championship events or may be requested in writing from the Series Co-ordinator by enclosing a SAE with first class stamp. Official confirmation of results is the responsibility of the organising club for each event.

3.0 AWARDS

- 3.1** Event organisers will be responsible for provision of awards at meetings for each class, the numbers to be specified in SR's. No cash awards are allowed, only trophies or goods. A prize/trophy presentation will take place at each event and drivers should attend to collect awards. If this is not possible another person may be asked to collect the award for the driver. If the award is not collected it may be disposed of as the club organising the event decides.
- 3.2** Trophies will be awarded for each event, the winner of the event will be the highest aggregate points scorer across all races of the day. Unless otherwise stated in event SR's. In the event of a tie the drivers qualifying times will decide.
- 4** **Transponders - AMB TranX 160 or 260 transponders** will be in use during the series and must be mounted upright (i.e. with 'R' clip at the top) as follows:- from the centre of the line of the front axle to the centre line of the transponder will be a minimum of 290mm, maximum of 390mm towards the rear of the kart. Transponders must be mounted in accordance with the manufacturers recommendations.
- 5** **Stickers** - If provided with them by the organisers three Championships logo stickers must be fitted to the kart, one on the front fairing facing forward and one on each side panel. Should, through reasons of sponsorship, a competitor be asked by the organisers of an event to carry an appropriate sticker he/she must comply.

6 CHAMPIONSHIP CALENDAR

F250 National & F450 National

The English Superkart Championships for F250 and 450 National will comprise of 2 events having at least two races per event. Each race will be a round of the championship and therefore a points scoring opportunity.

F125 Open

The English Superkart Championships for F125 Open will comprise of 2 events having at least two races per event. Each race will be a round of the championship and therefore a points scoring opportunity.

Division 1 Superkarts

The English Superkart Championships for Division 1 Superkart will comprise of 2 events having at least two races per event. Each race will be a round of the championship and therefore a points scoring opportunity.

- 6.1** For 2017 drivers will drop their worst score
- 6.2** The events are as follows :
- | | | |
|--------------------------|--------------------------|---------------------------|
| 1. Croft - April 29/30th | 1. Croft - April 29/30th | 1. Cadwell - August 5th |
| 2. Cadwell - August 5th | 2. Cadwell - August 6th | 2. Snetterton - Aug. 19th |

7.0 Technical Regulations
Karts must comply with MSA Kart General, Technical and Safety Regulations and Class regulations shown below.

7.1 Tyres - Slick tyre are open to any homologated by the CIK in the periods 2011 to 2019
Wet tyres are open to any homologated by the CIK in the periods 2011 to 2019

7.2 Fuel - Fuel must be a maximum of 102 octane. It must comply to either the regulation in the MSA Yearbook under Section B, Appendix 1: Tables or CIK Annuaire.

All systems of injection and/or spraying of products other than fuel is forbidden.

The use of power boosting or octane boosting additives by competitors in any fuel is prohibited.

Some power/octane boosters are carcinogenic.

It is mandatory to place the fuel tank between the main tubes of the chassis frame, ahead of the seat and behind the rotation axis of the front steering. Side tanks are not permitted

All systems of injection and/or spraying of products other than fuel is forbidden.

The use of power boosting or octane boosting additives by competitors in any fuel is prohibited.

Some power/octane boosters are carcinogenic.

It is mandatory to place the fuel tank between the main tubes of the chassis frame, ahead of the seat and behind the rotation axis of the front steering. Side tanks are not permitted

At least 1 litre of fuel must be left in the tank at the end of a race for fuel testing. Costs incurred for testing fuel as a result of a failed fuel sample will be payable by the driver concerned.

8.1 Noise Control and Noise Testing

8.1.1 Noise Testing – In order to reduce the noise, efficient exhaust silencers are compulsory. The noise limit in force is 102 dB/a maximum, including all tolerances and the influence of the environment. The noise will be measured at a distance of 0.5 metres from the exit of the silencer and at an angle of 45 degrees. The noise will be measured at an engine speed of :-

Division 1 Superkart - 7000 rpm (250 Mono running in Div. 1 is 5500 rpm)

Division 2 Superkart - 5500 rpm

F250 National & F450 National - 5500 rpm.

F125 Open - 7000 rpm

F125 KZ - 7000 rpm

Specific local noise regulations and monitoring will take precedence over these regulations.

8.1.2 All gearbox karts (CIK Division 1 not required) must have a currently or previously homologated CIK intake box correctly fitted, or one that is approved by the BSA for that class.

A CIK homologated box must not be modified with the exception of drilling holes in the mounting flange and drilling a maximum of two holes in the box wall, for the sole purposes of mounting on Gearbox karts.

The carburettor adapter is free providing a petrol tight joint is made between the box and the carburettor.

8.1.3 The following boxes have been approved by the BSA for use on gearbox karts with the exception of KZ (UK) :-
Single Cylinder FIS/2RV Motivation Design and Development Filtered Induction System Assembly, side fitting for rotary valve gearbox class engines, fitted with Pipercross foam filter element.

Twin Cylinder FIS/2T Motivation Design and Development Filtered Induction System Assembly, side fitting for rotary valve twin cylinder gearbox class engines, fitted with Pipercross foam filter element.

Single Cylinder FIS/2PR Motivation Design and Development Filtered Induction System Assembly, for 450ccc single cylinder four stroke engines and reed valve or piston port induction single cylinder two stroke gearbox class engines, fitted with Pipercross foam filter element. It must be fitted with the intake trumpets facing towards the ground

Single Cylinder FIS System 4 Clark Filtered Induction System Assembly, for 450cc single cylinder four stroke engines on Long Circuit ONLY

Single Cylinder Motiv A.F.I.S System 1 Filtered Induction System Assembly for F250 National engines on Long Circuit ONLY.

The KGR 13768 intake box is approved for F450 National

8.1.4 Unless specifically authorised exhaust lengths may not be varied whilst the kart is in motion

8.1.5 Regulation T8.1.6, T8.1.7 and T8.1.8 are mandatory for F250 National, F125 Open and F125 KZ (UK) (Division 1 & 2 Superkarts are covered by the CIK Regulations for Superkarts and T8.1.1 above)

8.1.6 Karts shall be provided with an exhaust silencer lying approximately parallel to the rear axle of the kart, and fed by a gas-tight tubular link pipe of a minimum 300mm length from the exit of the expansion chamber to the entrance of the silencer/muffler

8.1.7 The link pipe must have a bend of approximately 180 degrees for the engines exhaust ported to the rear. For engines exhaust ported to the front, the bend must be between approximately 45 degrees and approximately 180 degrees.

- 8.1.8 The muffler must have an external minimum cross section of 100mm and a minimum canister length of 380mm. The canister must be used with muffling material and/or baffling plates to be an efficient silencer. The exhaust exit diameter of the canister must be no greater than 38mm.
- 8.1.9 Regulation T8.1.10 and T8.1.11 are mandatory for F450 National
- 8.1.10 Karts shall be provided with an exhaust silencer lying across and over the rear axle of the kart in a downward facing direction, and fed by a gas-tight header pipe from the exit of the engine to the entrance of the silencer/muffler.
- 8.1.11 The muffler must have an external minimum cross section of 100mm and a minimum canister length of 380mm. The canister must be used with muffling material and/or baffling plates to be an efficient silencer. The exhaust exit diameter of the canister must be no greater than 38mm. It is however strongly recommended that the external minimum cross section should be 125mm and with a canister length of 600mm
- 8.1.12 Attention must be given to silencing systems maintenance. With the published reductions to permitted levels it is important that flex connections and joints are checked regularly and made good. Exhaust silencers which are capable of being repacked can suffer from declining performance and it is essential that repacking is carried out in accordance with manufacturer's instructions

9 **FORMULA 125 OPEN**

9.1 **Introduction :** This class is for water cooled, 125cc, single cylinder engines with a minimum bore of 53.9mm and a maximum stroke of 54.6mm. Fitted with a gearbox with a minimum of 3 forward gears and a maximum of 6 forward gears. The British Superkart Association offers the only National Championship for this class in the UK. **KTE - 2017 - 334**

9.2 **Chassis :** Must conform to current MSA Technical Regulations and MSA Safety Regulations. All chassis main parts must be firmly secured together on to the chassis frame. Flexible connections are only authorised for the conventional steering knuckle support, and for the steering system . All other devices with the function of one, two or three dimensional joints are forbidden. The chassis frame is the central and main supporting element of the entire vehicle. It must have the necessary strength in order to be able to absorb the loads which are produced when the vehicle is in motion. Any hydraulic, pneumatic or elastomeric elements for damping chassis oscillation are forbidden.

9.3 **Bodywork :** Either Short or Long Circuit style bodywork may be fitted to the kart. A bubble conforming to MSA Blue Book U17.22 and Diagram 7 and 8 is permitted as an alternative to a Nassau panel. Short circuit style front, side and rear bumpers complying with MSA Regulations are permitted when fitted with short circuit style bodywork, except for the CIK rear protection system

9.4 **Engines Eligibility :**

Any water cooled engine with a single cooling circuit that is previously or currently registered/homologated for the 125 Open, 125 National, CIK Formula C, CIK KZ1 and KZ2.

The engine must have a maximum of 3 exhaust ports/passages and a maximum of 6 transfer ports/passages

9.5 **Tuning Regulations :** Modifications to the engine are allowed.

- a) Engines may be fitted with a piston from any other eligible engine with the same nominal bore
- b) The bore and stroke may not be modified beyond the maximum 125cc capacity
- c) Crankshaft must be from the manufacturers parts list, but may be modified. For example, stuffer plates may be added, balance holes may be drilled and/or filled.
- d) The engine may be fitted with a connecting rod from any other eligible engine. The length can be from 105mm to 115mm between centres. The connecting rod must be made entirely from magnetic steel
- e) The engine may be fitted with a cylinder and head from a previous or later models of the same make providing the crankcase and/or cylinder stud centres are not changed
- f) Two piece cylinder heads are allowed. Heads must be original manufacture. Head volume is free choice
- g) The crankcase may have its volume changed by machining or adding stuffing material
- h) To accommodate different connecting rods and pistons the cylinder head, cylinder base and top and the crankcase deck may be machined. Extra cylinder gaskets or spacers may be fitted

Ignitions : May be self generating and/or battery powered. Ignitions are open choice but timing and cartography may under no circumstances be modified whilst the kart is in motion

9.6

9.7 **Carburation :** All air and fuel for combustion must pass through a single carburettor from the following list :

Dell Orto	Kiehen	Mikuni	Lectron
PHBE, PHM, PHSB, VHSB, VHSC, VSHS	PWK, PWM, PJ	VM, TM, TMX	Power Jet, Power Jet High Velocity

The carburettor may be bored or modified

Electronic carburation systems are not permitted

9.8 **Expansion Chambers :** Free choice of design but made from magnetic steel only

9.9 **Noise Control :** See regulations T8.1.1 to 8.1.10 above.

9.10 **Transmission :** Free choice of gearbox and primary gears

9.11 **Brakes :** Brakes to MSA Blue Book section U16.10.1 to U16.10.9

9.12 **Wheels and Tyres :** 5" or 6" diameter wheels and tyres with a maximum tyre size width of 8.0" rears and 5.5" fronts may be used. It is not permitted to mix 5" and 6" tyres on the same axle line. Only CIK homologated tyres are permitted from the periods 2011 to 2019 unless stated otherwise in the Championship regulations

9.13 **Weight :** L/C Style Bodywork 195kgs minimum. S/C Style Bodywork 180kgs minimum.

9.14 **Plates :** Blue number plates with white numbers.

9.15 **Age :** The class is open to any driver aged 16 or over on long circuits. Novice drivers are permitted on both long (closed to club and National B events only) and short circuits

FORMULA 250 NATIONAL

This class is restricted to MSA registered single cylinder engines. Engines must be of a maximum of 250cc. Engines of 175cc or more must be designed to have no more than five gears, or modified to have no more than five operational gears, and with piston and/or reed valve induction into the original induction tract. Provided they are registered with the MSA in the appropriate time period 'kit engines' are permitted, e.g. engines using donor parts from an existing engine or upgrade parts for an existing engine. Any alternative parts registered to fit an existing engine must be direct replacements without any requirement for machining of the original engine. The next period for inclusion of new engines commences 1.1.2016

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The Rotax 257 in five or six speed form is permitted.

So long as the silhouette of the crankcase, the sprocket output orientation position and bore and stroke of the engine remains unchanged, evolution model numbers are accepted if complying with F2.4. References to Section U refer to the MSA Competitors' and Officials' Yearbook.

- 10.1 **Chassis** : Any chassis complying with MSA Competitors and Officials Yearbook Regulations for gearbox karts. All chassis main parts must be firmly secured together on to the chassis frame. Flexible connections are only authorised for the conventional steering knuckle support, and for the steering system. All other devices with the function of one, two or three dimensional joints are forbidden. The chassis frame is the central and main supporting element of the entire vehicle. It must have the necessary strength in order to be able to absorb the loads which are produced when the vehicle is in motion. Any hydraulic, pneumatic or elastomeric elements for damping chassis oscillation are forbidden. Minimum wheelbase is 106cm.
- 10.2 **Engine** : Eligible engines are as follows :
- | | |
|--|---|
| Rotax 257 (either five or six gears) | THR Engineering - THR02-14 (kit engine) |
| Cagiva WMX 250/88 Cross | THR Engineering - THR SS250 (kit engine) |
| Honda CR250. | Viper Racing UK - SK250S (kit engine) |
| Kawazaki KX250. | Viper Racing UK - EVO250S (kit engine) |
| KTM 544/545/546/548. | Viper Racing UK - SK250S1 (Engine) |
| Moto TM Cross 250. | IAMEX30 Super Shifter 175cc |
| Suzuki RM250 Z to V (1982 -1997 inc.). | DEA Technology - SK250 Single pneumatic exhaust valve |
| Yamaha YZ250. | (alternative parts - Cylinder) |
| WIWA Gas Gas K250 | PFP - Victory - CR250R (alternative parts - Crankshaft) |
| DEA Technology - SK250 Single (engine) | |
- So long as the silhouette of the crankcases, the sprocket output orientation position and the bore and stroke of the engine remains unchanged evolution model numbers are acceptable.
- 10.3 **Tuning Regulations** for engines 180cc – 250cc
Modifications to the engine are allowed, provided the following are not varied.
- Stroke
 - Bore (outside maximum limits)
 - Connecting rod centre line (magnetic material only)
 - Crankshaft must be on the manufacturers parts list
 - External appearance of the engine other than carburettor, ignition system, carburettor rubber mounting, clutch cover, engine mounting points. It is permitted to remove any kick start mechanism bumps and bosses on the back of the crankcase and the addition of a fuel pulse pump adapter.
 - Number of carburettors (1 only). The material magnesium is not permitted.
 - All systems of injection and/or spraying of products other than permitted fuel are forbidden.
 - No form of electronic carburation system
- 10.4 The ignition system type is open BUT the electronic unit box and the coil must receive only one feeding energy source of the rotor/stator or of a battery and one crankshaft pick-up signal in order to set the ignition signal. The advance and cartography may under no circumstances be modifiable whilst the kart is in motion
- 10.5 **Tuning Regulations** for kart production engines up to 179cc:
No modifications to the engine are allowed unless stated below, and provided the following are not varied. Polishing and Machining is permitted
- Stroke
 - Bore (outside maximum limits stated on the ficheor registration document) Piston must not exceed the maximum bore on the registration document but need not be original equipment
 - Connecting rod centre line (magnetic material only), must be on manufacturer's parts list for the engine
 - Crankshaft must be on the manufacturer's parts list for the engine
 - External appearance of the engine, colour may be changed
 - Carburetter: Only Dell'Orto Type VHSB with VHSB 39 as the largest permitted carburetter. The material magnesium is not permitted. All parts may be changed so long as they are genuine and on the carburetter manufacturers parts list. Tuning is permitted.
 - All systems of injection and/or spraying of products other than permitted fuel are forbidden
 - Reed petals may be varied so long as they fit in the manufacturers registered reed block

- i) The ignition system(s) as registered with the engine (mapping must remain as per the manufacturers specification)
- j) Exhaust pipe as described in the registration document
- k) The number of ports and ducts in the engine may not be varied
- l) The head volume may not be less than 17cc measured as per the CIK method described in Appendix 5 of the kart race yearbook. The minimum squish is 0.9mm

10.6 **Noise Control** : See regulations T8.1.1 to 8.1.10 above

10.7 **Transmission. Gearbox** for engines over 179cc - maximum of five gears except for the Rotax 257 which can be used in 5 or 6 speed form. Gear Ratios can be varied.

Transmission. Gearbox for engines up to 179cc - maximum of six operational gears Ratios may not be varied and must remain as registered with the engine.

10.8 **Brakes** : Brakes to MSA Blue Book section U16.10.1 to U16.10.9

10.9 **Wheels and Tyres** : 6" diameter wheels and tyres only can be used with a max. tyre width of 8". It is not permitted to mix 5" and 6" tyres on the same axle line. Only CIK homologated tyres are permitted from the periods 2011 to 2019

10.9 **Weights** – The minimum weight with driver on the completion of any part of the event :
For karts with engines over 179cc will be 195kgs short circuit or 200kgs if a wing is fitted with any other sidebar combination, or 208kgs when racing in a long circuit meeting or in long circuit trim,

For karts with engines up to 179cc will be 180kgs short circuit or long circuit or 190kgs if a wing is fitted with any other sidepod or sidebar combination or in long circuit trim.

10.10 **Plates** : White number plates with black numbers.

10.11 CIK Crash tested bodywork is only permitted if fitted with bumpers (front & side) specified in U17.2 to U17.12.11 and U17.14 through to U 17.17.4 of the MSA Blue Book

10.12 Carbon Fibre or Kevlar bodywork is specifically permitted in F250 National .

10.13 **Age** : The class is open to any driver aged 16 or over on short circuits and aged 17 and above on long circuits. A novice driver may compete on short or long circuit (only at closed to club or National B events).

11 **FORMULA 450 NATIONAL**

This class is a performance equivalent to the existing 250 National class and is limited to series production 4 stroke single cylinder engines of a maximum of 450cc designed to have no more than five gears, or modified to have no more than five gears. Engines must be readily available production units.

Where engine manufacturers have different specifications of the same base engine (e.g Moto X, Super Moto etc) crossover of parts will be permitted between these engine model types but each variant must be registered

Engines will be registered for a three year period commencing Jan 2015 after which new engines may be registered following a registration process every three years. Engines once registered will remain on the list for three periods (nine years). The next period for inclusion of new engines commences 1.1. 2018

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11.1 **Chassis** : Any chassis complying with MSA Yearbook Regulations for gearbox karts. All chassis main parts must be firmly secured together on to the chassis frame. Flexible connections are only authorised for the conventional steering knuckle support, and for the steering system . All other devices with the function of one, two or three dimensional joints are forbidden. The chassis frame is the central and main supporting element of the entire vehicle. It must have the necessary strength in order to be able to absorb the loads which are produced when the vehicle is in motion. Any hydraulic, pneumatic or elastomeric elements for damping chassis oscillation are forbidden. Minimum wheelbase is 106cm.

11.2 **Engine** :

4 stroke series production single cylinder engines up to a maximum of 450cc. All components except ignition, piston, connecting rod and cam clamping blocks must be OEM parts as at the time of manufacture. The connecting rod must be magnetic material. All OEM parts must be on the manufacturers parts list for the model type registered.

Apart from those listed in the tuning regulations below all other OEM parts cannot be modified.

Eligible Engines are :

Honda CRF 450R (2004, 2005 & 2006)

KTM SMR & SX-F (2010 -2012)

Yamaha YZ450F Z,A,B & D (2010 – 2013)

11.3 **Tuning Regulations** :

Modifications to the engine are allowed, provided the following are not varied.

- a) Stroke
- b) Bore (outside maximum limits)
- c) Connecting rod centre line and connecting rod centres
- d) Crankshaft
- e) Camshafts
- f) External appearance of the engine must be as original except for the ignition system and oil feed system.
- g) Number of carburetors if fitted (1 only).
- h) All systems of injection and/or spraying of products other than permitted fuel are forbidden.
- i) Fuel injection is permitted only if Original Equipment Manufacture on the model being registered.
- j) It is not permitted to have an electronic connection to a carburettor unless this was standard OEM at manufacture

Permitted Modifications

(a) (b) The OEM cylinder head may be gas flowed and polished

(b) Slipper Clutches are permitted

(c) The addition of a fuel pulse pump adapter is permitted

(d) In the interests of reliability the fitting of an alternative oil feed system to the engine is permitted

Because it is common practice for engine manufacturers not to put unique numbers on replacement crankcases should a competitor need to change crankcases it is required that the crankcases being replaced be presented to the Championship eligibility scrutineer who will transfer over the number from the engine crankcases being replaced onto the new crankcases.

The ignition system type is open BUT the electronic unit box and the coil must receive only one feeding energy source of the rotor/stator or of a battery and one crankshaft pick-up signal in order to set the ignition signal. The advance and cartography may under no circumstances be modifiable whilst the kart is in motion

11.4

11.5 **Noise Control** : See regulations T1.9 to 1.11 above

11.6 Transmission. Gearbox : maximum of five gears. The engine Manufacturers ratios within the registration must be maintained.

11.7 **Brakes** : Brakes to MSA Yearbook section U16.10.1 to U16.10.9

- 11.8 **Wheels and Tyres** : 6" diameter wheels and tyres only must be used with a max. tyre width of 8". Only CIK homologated tyres are permitted from the periods 2011 to 2019 unless stated otherwise in the Championship regulations
- 11.9 **Weights** – The minimum weight with driver on the completion of any part of the event will be 199kgs with just bumpers and side bars. If a wing is fitted to the above the weight will be 204kgs. The weight with any other form of bodywork will be 218kgs
- 11.10 **Plates** : Red number plates with White numbers
- 11.11 CIK Crash tested bodywork is only permitted if fitted with bumpers (front & side) specified in U17.2 to U17.12.11 and U17.14 through to U 17.17.4 of the MSA Yearbook
- 11.12 Carbon Fibre or Kevlar bodywork is specifically permitted in F450 National.
- 11.13 **Age** : The class is open to any driver aged 17 and above on long circuits. A novice driver may compete on long circuit (only at closed to club or National B events).

12 DIVISION 1 SUPERKART

- 12.1 CIK-FIA regulations for Division 1 Superkart apply unless otherwise stated below
- 12.2 **Noise Testing :**
The noise testing will be as per MSA Regulations unless otherwise stated in Event SR's
- 12.3 The use of chemical treatment on tyres is expressly forbidden. Any competitor found using chemical treatment on tyres in contravention of K134, will be banned from racing at all BSA clubs and all BSA Championships for a minimum of one year. Drivers may appeal any decision to the BSA Executive Committee.
- 12.4 **Wheelbase :** The minimum : 106cm Maximum : 127cm
Track : at least 2/3 of the wheelbase used
Overall length : 210 cm maximum Overall Width : 140cm Maximum
Height - 65cm maximum from the ground, seat excluded
- 12.5 **Engine :** All engines currently or previously homologated by the CIK for Division1 Superkarts
Maximum cylinder cubic capacity: 250 cc obtained:
either by one engine (maximum 2 cylinders) cooled by natural air flow or water cooled,
or by 2 single-cylinder engines currently or previously homologated in ICC/KZ.
- 12.6 **Ignition :** The advance and cartography may under no circumstances be modifiable whilst the kart is in motion
- 12.7 **Gearbox:** Gear ratios are open
- 12.8 **Tyres :** 6" CIK Homologated tyres only from the periods 2011 – 2016
- 12.9 **Minimum weight:** one single cylinder engine: 208 kg including the bodywork; minimum weight of the kart itself: 98 kg without the bodywork and without fuel;
other engines: 218 kg including the bodywork; minimum weight of the kart itself: 113 kg without the bodywork and without fuel
- 12.10 **Plates :** Yellow number plates with Black numbers
- 12.11 **Fuel Tank :** The total fuel tank capacity must be 19 litres maximum. The exit aperture must not be more than 5mm.
It is mandatory to place it between the main tubes of the chassis frame, ahead of the seat and behind the rotation axis of the front steering. Side tanks are not permitted
- 12.12 It is forbidden to attach ballast to the seat but only to the main tubes of the chassis frame or to the floor tray with at least two bolts of a minimum diameter of 6mm