

## RULEBOOK – GRANJA VIANA 500 MILES KARTING RACE

## Article 1: ORGANIZATION

The GRANJA VIANA 500 MILES KARTING RACE, 23rd edition / 2019 will be organized by Clube Granja Viana and supervised by FASP (Federação de Automobilismo de São Paulo) on 20 and 21 of December of 2019.

### Article 2: MATTERS NOT COVERED BY THIS RULEBOOK

2.1 All matters not covered by this rulebook shall be resolved by the Technical Department of FASP, based on the National Karting Regulation (RNK) and the Motor Racing Sporting Code (CDA) of Confederação Brasileira de Automobilismo (CBA).

## Article 3: CATEGORY

- 3.1 ALLOWED RACING LICENSES The race will allow teams composed by full 13-yearold riders with kart license: Piloto Júnior de Kart (PJK), Piloto Novato de Kart (PNK), Piloto Graduado de Kart (PGK), Piloto Senior de Kart A (PSKA) and Piloto Senior de Kart B (PSKB).
- **3.1.1** Holders of Master Licenses, Piloto Graduado de Carro B (PGC-B) and Piloto Graduado de Carro A (PGC-A), when invited by FAU to participate in regional karting events, will not require a specific kart license (according to ART. 31.3.9 of the Motor Racing Sports Code (CDA))
- 3.1.2 Drivers aged 13 to 15 will be accepted only with the approval of the Organization; karts that have drivers at this age must inform the Organization Office before paying their entry fee.
- **3.1.3** An orange circle of 60 mm in diameter shall be placed next to the number plate in case the team has any driver aged as the article above.
- 3.1.4 Licenses allowed for the Light Class: Piloto Júnior de Kart (PJK), Piloto Novato de Kart (PNK), Piloto Senior de Kart B (PSKB) and Piloto de Kart Indoor (PKI). In the Light Class it will be admitted only 01 driver per team licensed as follows: Piloto Graduado de Kart (PGK), Piloto Senior de Kart A (PSKA), Master Licenses, Piloto Graduado de Carro B (PGC-B) and Piloto Graduado de Carro A (PGC-A)

### **3.2 TEAMS**

**REGISTRATION** – A driver will be allowed to participate in a maximum of 02 teams, and must be registered in the appropriate teams, otherwise the team will be automatically "disqualified".

- **3.2.1** CLASS A TEAMS They can consist of at least 02 and a maximum of 10 drivers, regardless of their ranks.
- **3.2.2** Class A will consist of the first 20 Karts of the 500 Miles group, except for the 500 Light Group.





- **3.2.3 CLASS B TEAMS** They can consist of at least 02 and a maximum of 10 drivers, regardless of their ranks.
- **3.2.4** Class B will be formed from the 21st place of the category 500 Miles, ie, except the 500 Light Group.
- **3.2.4.1** Payment of the registration fee of:
  - Cash payment:

500 MILES	500 LIGHT
BRL 11.500,00	BRL 21.900,00

• Installment payments up to 08 times for 500 MILES:

10/04	10/05	10/06	10/07	10/08	10/09	10/10	10/11	
BRL 12.500,00								

Installment payments up to 08 times for 500 LIGHT:

10/04	10/05	10/06	10/07	10/08	10/09	10/10	10/11
BRL 22.900,00							

### **500 MILES**

- Registration for the event;
- Free practice;
- Rent of 02 engines;
- 20 liters of regular gasoline for Free Practice;
- Regular gasoline for Qualification, Top Qualify and Race;
- 01 car credential per kart;
- 03 credentials for mechanics;
- 02 to 10 driver credentials (only kart drivers);
- Each registered driver will be entitled to 01 special guest;

### **500 LIGHT**

- Registration for the event;
- Rent of 01 engine;
- Rent of 01 chassis with 2.5 sets of wheels and axle;
- 4.5 sets of slick tires, 2 sets for practice and 2.5 sets for the race;
- Rent of 01 non-painted/non-stickered fairing;
- Regular gasoline for the whole event;
- 01 car credential per kart;
- 02 to 10 driver credentials (only kart drivers);
- Each registered driver will be entitled to 01 special guest;
- Unique mechanic team for all karts entered in the group;
- Space for Team Pit assembly;
- After the race is over, a kart inspection will be done and damaged parts must be replaced by the team; no spare parts are included;





- **3.2.4.2 500 LIGHT GROUP** A minimum of 10 karts will be required to complete the group within the event.
- **3.2.5 TEAMS** They can consist of at least 02 and a maximum of 10 drivers, regardless of their ranks.
- **3.2.6** Main group drivers are allowed to race in a 3rd (third) kart in the 500 LIGHT group, as long as authorized by the organization.
- **3.2.7** Changes (names of drivers) will be accepted in teams only until 12/07/2019 (December 7th). If it exceeds the deadline only with the authorization of the organization.
- **3.2.8** If a team with all the payments done, for any reason, withdraws from the event, it will be charged a 35% fine of the total entry fee.

### Article 4: DRIVER RESPONSIBILITIES

- **3.2.9** All drivers must sign a liability form at the Organization Office. Otherwise the team will be prevented from competing in the race.
- **3.2.10** All drivers must be present at the Official Briefing with the Race Director, which will be held at a location determined by the organization.
- **3.2.11** Electronic wristbands will be available to each driver, with mandatory use, with checkings starting on Friday, December 20th. In the case a driver is found without the wristband, his participation in the race will not be allowed. If the driver has entered the track and is not registered in the kart, the team may be disqualified from the race.

## Article 5: RACING FORMAT

- **5.1 QUALIFYING** The teams will be divided into 02 groups, called group 01 and 02, this division will be made in order of registration. Each group will make 1 Qualification of 10 minutes.
- 5.2 GRID GROUP 1 X GROUP 2 Best time will determine which group will be the odd positions on the grid 1, 3, 5 and so on. Once the pole group is determined, the top 20 will participate in Top Qualify. Positions from 21st on of the grid will not be changed. The first 20 must go to a specific area indicated by the Race Direction and must remain there without any intervention by mechanics or driver (except tire pressure, which may only be lowered) for scrutineering. The others will go to the Park Fermé.
- **5.3 TOP QUALIFY** The first 20 karts will make a 1 timed lap, no warm-up lap, starting from a line indicated by the race direction, at some distance from the start / finish line. After completion of the timed lap the driver must go to Park





Fermé and remain there without any intervention by mechanics or anyone for scrutineering.

The TOP QUALIFY sequence will be - 20th, 19th, 18th, 17th, 16th, 15th, 14th, 13th, 12th, 11th, 10th, 9th, 8th, 7th, 5th, 4th, 3rd, 2nd and 1st.

The TOP QUALIFY result will determine the top 20 positions.

## 5.4 RULES FOR QUALIFYING AND TOP QUALIFY

- **5.4.1** Only one driver per team will do both the Qualifying and Top Qualify.
- **5.4.2** During the qualifying drivers will not have access to the pits and must perform any necessary mechanical repair during Qualifying in the Maintenance Area, determined by the Race Direction.
- **5.4.3** At the end of Qualifying the driver designated by the team, that took part of the session must go to scales to weigh together with the kart, under penalty of disqualification.
- **5.4.4** At the end of the Top Qualify the driver designated by the team, that took part of the session must go to the scales to weigh together with the kart, under penalty of disqualification.
- **5.4.5** A driver who leaves the track and or throw dirt or debries over the track after the completion of the Top Qualify will be disqualified, starting at the end of the grid.
- **5.4.6** The substitution of a driver between the Qualifying and Top Qualify will only be allowed in case of major force and upon express authorization by the Race Organization.

If at any time during Qualifying or between the end of the Qualifying and the start of Top Qualify any irregularities in the engine exhaust system (accidental or otherwise) are identified, the kart will be disqualified (having received the black flag with orange circle or not) and will drop to the end of the grid. If the irregularity is found in any of the 20 Top Qualify karts during or after its Top-Qualify lap is performed it will also be disqualified and will start at the end of the grid, not at the end of the top 20.

These are irregularities in the exhaust system (but not only):

- Any crack or break in the exhaust curve or silencer WACS KGV2018;
- The lack of at least 1 of the 2 connecting springs between the previous parts;
- Clearance at the connection of the two pieces greater than 1mm in diameter;
- Not allowed modification of the exhaust curve attachment to the engine as performed by the organization;
- Exhaust gasket tampering;
- Any other attempt to modify any of these components, whether veiled or not, which results in reduced engine exhaust restriction.





- **5.5 LUCKY DOG** From the twenty-first to last placed on the grid, 1 kart will be drawn randomly, and will start between the second and tenth placed of the grid, position defined by another draw.
- 5.6 RACE START It will be Le Mans Style. 1 mechanic behind the tire barrier per kart will be allowed; this must keep the engine running, preventing the kart from moving until the driver arrives. From the arrival of the driver it is prohibited for the mechanic to cross the tire barrier for any reason until the last kart on the grid passes him. Failure to comply with this prohibition will result in TIME PENALTY of 1 minute.
- 5.7 RACE DURATION The race will have a maximum duration of 12 hours (There may be changes in the maximum race time according to the need for TV Broadcasting). In the event of a red flag period, the time at which the race has been stopped will not be reset.
- 5.8 MANDATORY STOPS All teams must have 02 laps of at least 15 minutes (which will be made official by the timing) and 05 laps with at least 06 minutes. The mandatory laps listed above must all be performed UNTIL BOX CLOSED (11:40 hr test). Laps of 15 or 06 minutes will only be validated if they are closed at the exit of the box.
- **5.8.1** From 10:00 of time elapsed will be allowed to perform 01 Splash and Go for up to 7 liters. This stop will have the minimum time and its procedure published in a Rules Bulletin. Failure to comply with Splash and Go rules, if performed, will be punished in the same way as other mandatory stops.

### 5.9 RED FLAG

- 5.9.1 The mandatory stop (15 minutes) completed during the period in which the race is stopped with the red flag shall not be considered valid. If a team is in the box area at the moment the red flag is presented, the time of this stop will be interrupted as well; only the time taken until this stoppage is valid. The remaining time must be accomplished from the moment the race has its new start.
- **5.9.2** In case of RED FLAG, 01 mandatory return of 06 minutes will be decreased from the regulatory total for every 01 hour of interruption.
- 5.9.3 The last of the mandatory stops must be completed until 11:40 minutes of the Race time. In case of RED FLAG before the mandatory stop time (11h40min of the start of the race), and the race is restarted after this regulatory time of (11h40min of the start of the race), the team that has not yet complied, will have a maximum of 02 (two) laps after the restart to accomplish them.





- **5.9.4** In the event of termination of the event with RED FLAG, the teams that did not accomplish all the mandatory stops will be punished with the addition of the result of:
  - Mandatory stops of 06 minutes: 09 laps per missed stop;
  - Mandatory 15 minute stop: 20 laps per missed stop;
- **5.10 RACE NEUTRALIZATION THROUGH VIRTUAL SAFETY KART (VSK)** The race will be neutralized at the discretion of the Race Director (accidents, kart removals, partial track blocking, etc.) by:
- **5.10.1** Display of a sign on the PSDP (Race Director Signing Post) and all signposts, with the words "PROVA NEUTRALIZADA" (NEUTRALIZED RACE).
- **5.10.2** Yellow flags or yellow headlights all over the track.
- **5.10.3** Virtual Safety Kart deployment, behind which all drivers must position themselves in single line, maintaining the current track position (delayed drivers cannot be overtaken unless signaled by the Race Direction) from the leader (first kart behind SK).
- **5.10.4** Pit entry is prohibited during the race neutralization.
- 5.10.5 The Race Director will indicate the restart a lap prior to that. The leader may resume speed right after the banked turn; overtaking will only be allowed after the green flag is waved.
- **5.10.6** The race neutralization period will be ended when; after removal of the Safety Kart Virtual (SK) sign, the yellow lights have gone out, the yellow flags and signs have been removed from the PSDP signposts and the PSDP green flag waved.
- **5.10.7** If the race time is changed, Article 5 may be amended together.
- **5.10.8** While under Safety Kart:
  - a) Karts that are out of fuel are allowed to enter the pits (which will be closed), fill with one (1) liter and go directly to the exit of the pits (without stopping anywhere until the scales at the exit), and resume the formation right behind the last one. If, in the event of refueling, it is found that the stoppage due to out of fuel situation has been simulated or is not justified (engine failure for any other reason), there may be a penalty at the discretion of the Stewards;
  - b) The kart that suffers a tire puncture in this situation will be allowed to enter the pits, replace only the damaged tire and exit directly out of the pits, resuming the formation behind the last one. If it is found that the stop was simulated or unjustified (chassis failure for any other reason), there may be a penalty at the discretion of the Stewards;
- **5.11 BLUE FLAG** It will only be shown from the time of 11:40 h after the race, to allow the passage of the top 3 (three) places in the General Classification.

Article 6: WEIGHT





- **6.1 WEIGHT** The minimum weight required for the kart/driver set in running order is 200kg. This is the absolute minimum weight and can be checked at any time by the Technical Delegates, so the kart will be weighed in running order, at the end of the qualifying, during the race and at the end of the race. Every time the kart enters the box during the race for any reason, it must first pass the scales to check its weight.
- **6.2 WEIGHT DURING PRACTICES** During practices with the engines rent by the organization, it will be mandatory to pass the scales of the entry and exit of the box, and will be released to the track only the kart with a minimum weight of 200 Kg.
- 6.3 FASTENING The ballast must be attached to the kart by means of screws and nuts (butterfly nuts are allowed). If a kart with loose ballast is identified it will result in the immediate exclusion of the team from qualifying or the race.
- **6.4 OPTIONAL QUICK COUPLER** To lock the ballast plates to the support pins the quick coupling system may be used, which is restricted to the ballast pins that are attached to the kart chassis, and their use in weights attached to the seat is forbidden. This item will be considered optional and the previous system can be maintained.

## **6.5 WEIGHING RULES**

- **6.5.1** The kart must be switched off over the scales. It will be mandatory to weigh the kart on the scales placed at the exit of the box, and during the race, only the kart weighing at least 205kg will be allowed to return to the track.
- **6.5.2** If the team decides to modify the weight of the kart after weighing in the box exit scales, the team shall perform the weighing again, respecting the order of the queue.

## Article 7: BOX ENTRANCE

- 7.1 All entries in the Box must be at least 06 minutes.
- **7.2** The driver must stop the kart completely over the scales and wait for the steward release order.
- **7.3** After being released from the scales, the driver shall proceed at reduced speed, being constantly evaluated by the stewards in pit lane; if he/she thinks the speed is abusive, the driver will be punished according to Article 20 ITEM 20.11.
- **7.4** If the engine does not start after weighing, the kart may be pushed (by only one (1) accredited mechanic) as long as the previous item is obeyed.
- **7.5** In the event of a strand on the track, any mechanic (after Race Director's authorization) may assist in loading and / or bringing the kart to the pits, the only place the team mechanics may work on the kart.





### Article 8: REFUELING

- **8.1 FUEL TANK** The fuel tank must be presented free of any residue (solid, liquid or variations such as gel). The organization may, at any time, request that the tank be emptied and refueled before scrutineering by way of pre-inspection.
- **8.1.1** Original from the chassis manufacturer; non-interchangeable with tanks from different manufacturers.
- **8.1.2** Refueling will be made right after the weighting at the entrance of pit road.
- **8.2 QUALIFYING / RACE** For qualifying and race, each refueling will offer a maximum of 07 liters of fuel.

### **8.3 TEAM RESPONSIBILITIES**

- **8.3.1** It is the responsibility of the team that the kart is fueled with the correct type so that no damage is inflicted to the engines. The use of another fuel or tampering with itmay cause disqualification of the team / driver.
- **8.3.2** During the refueling operation, the engine must de shut off and the driver be out of the kart.
- **8.3.3** Fueling (the first) and refueling of the karts during qualifying and race must be done in the refueling area determined by the organization and only by designated people for this function.

## Article 9: NUMBERING

- **9.1 NUMBER POSITION** The kart numbering should be placed on top of the front panel and in the center of the rear bumper.
- **9.1.1** It will be mandatory to use event sponsor stickers provided by the organization; the sticker must be placed below the front panel number.







- **9.1.2** We will provide electronic barcodes to be fixed above the kart number, the code should be centered on the number plate, with conference starting on Friday (20/12). The use of the bar code is mandatory; if the organization identifies that the kart is not spotting the bar code it cannot participate in the race.
- **9.2 NUMBER MEASURES** The numbering should be placed on a board measuring at least 200x200mm +/- 10mm, in white, with the numbers 150mm +/- 10mm in height and a dash of 20mm +/- 5mm in black.
- **9.2.1 500 LIGHT** The numbering should be placed on a table measuring at least 200x200mm +/- 10mm, in yellow, with the numbers 150mm +/- 10mm in height and a dash of 20mm +/- 5mm in black.
- 9.3 NUMBER REQUEST AND RESERVATION The number will be chosen by the team/driver according to availability, and in chronological order of entries. The numbering may be changed upon written request form available at the organization office, until Friday, 07/12/2019, provided there are no conflicts with another team/driver. Participation in qualifying or race with a different numbering than the one registered in the registration form may cause the kart to be disqualified. The correct identification of the kart through its number is the sole responsibility of the team/driver.
- **9.4** Kart number plates will bear the name of the race, as well as their sponsors. Changes will only be accepted with the permission of the organization.

## Article 10: PERSONAL EQUIPMENT

9.5 It is mandatory for practices, qualifying and race the use of a protective helmet, properly tied, with visor, gloves, competition shoes and overalls. The helmet and overalls must contain the blood type and rh factor of the driver. During the race it will be mandatory to use the driver's name on the front of the helmet, in a visible place (minimum vertical measurement of 2 cm). A driver's equipment may be checked for functional status, serviceability or approval at any time by any steward. If any irregularity is found, the garment will be apprehended and the driver will be ordered to report back to the steward with another that meets the requirements.

#### Article 11: MECHANICAL REPAIRS

**9.6** Any mechanical repair of the kart during the race shall be done in the pit area. In the event of breakage, accident, lack of fuel on the track or any other reason





that prevents the driver from bringing the kart to the boxes by his own means, the Crew Chief shall inform the Race Director who may, at his discretion, neutralize the race (Full Course Yellow). In this case, it will be necessary to wait until all karts are at reduced pace, with overtaking prohibited, and only then will the stranded kart be removed from the track.

Mechanics may only enter with the express permission of a steward. Failure to comply may result in punishment for the team.

## Article 12: SCRUTINEERING (TECHNICAL INSPECTION)

Before the qualifying, a Technical Inspection will be carried out for fuel, oil and engine sealing. After the qualifying another will be performed for weight and seals

Another may be held before the start.

All teams will have the engines installed in their chassis, sealed to the chassis frame at the time stated in the Official Event Schedule. All teams must respect the engine seal to the chassis made by the organization. In the event of changing the engine, the team shall notify the Technical Delegate to oversee the break of the engine seal and the installation of a new one joining the new engine to the chassis, control in the data sheet and transport of the engine removed to the Engine Room, under penalty of disqualification of the kart. Any team may, at any time and for any reason, have their engine or seal inspected by the Technical Delegate, including the engine that has been replaced.

The last Technical Inspection will be held at the end of the race, so all karts that qualify for the Final Classification shall go straight to Park Fermé Checkered Flag.

## Article 13: TIRES

- **13.1 OFFICIAL PRACTICES** The Organization will determine and register 02 sets of tires for each team, of the same compound: MG VK Orange.
- 13.2 OFFICIAL PRACTICES: 500 LIGHT The Organization will determine and register 02 sets of tires for each team, of the same compound: MG VK Orange. Upon completion of free practice the tires will be retained by the organization regardless of their use.
- 13.3 RACING TIRES The Organization will determine and register 02 complete sets of tires plus 02 fronts tires for each team, of the same compound, MG VK Orange, with barcodes for identification, which will be purchased from the company determined by the organization. The use of tires other than sealed tires for practices, qualifying and race is prohibited. Tire exchange between karts will not be allowed, regardless of whether they are karts of the same team.
- 13.3.1 RACING TIRES: 500 LIGHT The Organization will determine and register 02 complete sets of tires plus 02 fronts tires for each team, of the same compound, MG VK Orange, with barcodes for identification, which will be





purchased from the company determined by the organization. The use of tires other than sealed tires for practices, qualifying and race is prohibited. Tire exchange between karts will not be allowed, regardless of whether they are karts of the same team.

- 13.4 RAIN TIRES The rain tires will be of the MG WT WHITE brand. It is mandatory to seal 01 set of tires (new or used) for the race. This sealed set must be the first to be used in case of wet track.
- **13.4.1** TIRES CHECKING: 500 MILES / 500 LIGHT For practices and race the tires will be sealed and painted by the organization.
- 13.4.2 In the Park Fermé before the scales at the pit entrance the organization will check the tire barcodes. It will be the teams responsibility to keep at least one (1) barcode of each tire intact.
- 13.4.3 Tires may be checked at any time during all sessions and race (chemical additives and barcodes).
- 13.5 TIRES EXCHANGE In the event of a puncture in a tire, identified at the Checking Point at Pit Entrance, the exchange will be authorized. If a tire is punctured, and the organization allows (the replaced tire and the replacement must be presented to the Technical Delegates for evaluation and registration of the new code on the kart registry), the exchange will be made by a used tire of that particular kart practice sets of the same compound.
- **13.6** The teams are not obliged to start the race with the same set used in Qualifying.
- **13.7** Tires shall only be inflated with compressed air.
- **13.8** The Organization shall have no liability, civil or criminal, depending on the quality of the tires supplied by the manufacturers for any competitions. This will be the sole and exclusive responsibility of the tire manufacturer (s).
- **13.9** The use of pneumatic or electric tire changing machines will be permitted.

## Article 14: CHASSIS / FAIRING

14.1 CHASSIS – CIK / FIA and / or CBA homologated, 90mm aluminum rear wheel hubs (between the wheel flange abutment face and the end of the part), 90mm aluminum front wheel hub (between the wheel flange abutment face and the end of the part), front and rear all-steel bearings, CIK / FIA and / or CBA homologated plastic rear protection or steel with rear wheel guard flaps.





The front hub bearings are integral portions of the part for full length measurement purposes.

No alterations will be allowed to their original chassis frame except those necessary to fix the engine and weight support. Only one chassis per TEAM (defined by kart number), declared and sealed, may be used. The declared chassis may not be changed unless authorized by the Technical Delegates.

**14.2 FAIRING** – Model KGV2018 / 2019, it is mandatory to make fairing cuts according to available templates. Any other modifications that may or may not aerodynamically alter the fairing are prohibited. No aerodynamic attachments may be added to the kart fairing (spoilers, airfoils, fins, gurneys, floors, venturis, etc.).

For safety and reliability reasons, it is mandatory to use, no matter the chassis brand, the following fairing structure and fixation devices:

- Rear attachment: two support rods fixed directly to the longitudinal chassis members;
- Front attachment: bolted directly to the original front fairing; rubber bumpers can be used as spacers on the front and mandatory on the sides of the fairing;
- Side mounting: bolted to the original side pods;
- Rear bumper: CIK / FIA and / or CBA homologated plastic rear protection or full metal bumper fully covered with foam sticks (swimming pool noodles); minimum width of 1340 mm (without bottom bar)).



FRONT WHEEL BOX MAXIMUM HEIGHT – 300 mm FRONT WHEEL BOX MINIMUM HEIGHT – 290 mm



REAR WHEEL BOX MAXIMUM HEIGHT – 380 mm
REAR WHEEL BOX MINIMUM HEIGHT – 360 mm





# FRONT FAIRING SIDE DISTANCE



## **BALLAST QUICK COUPLER**





AIR VENTILATION HOLES ON THE REAR PART - DIAMETER OF 44 mm AND DISTANCE BETWEEN CENTERS OF 200 mm



NOTE: HEIGHTS MAY BE RANDOMLY CHECKED AT ANY TIME OF THE EVENT. Failure to comply with this item may result in punishment for the team.

**14.3 SPECIAL NEEDS DRIVERS** – Other adjustments and changes that may be required for full adaptation are permitted for use by riders with disabilities (approval pending specific inspection).





- 14.3.1 CRITERIA A team that has at least 1 such driver may be allowed to have a second, specially adapted kart. The kart change will take place in front of the box where this team is located, and the driver who replaces the special needs driver must remain next to his kart and can only sit and be pushed after the kart that has entered the box has stopped. The team should keep the second kart in Park Fermé at any tome it is not being used. The kart will be released 10 minutes before the team's scheduled driver change time, always accompanied by a steward, and will not be able to make any repairs until the kart to be replaced is not placed at the door of his box. In the event of an accident or breakdown, the kart can be immediately removed from Park Fermé and will only go to the track when the other damaged kart is retrieved and fully repaired, always accompanied by a steward or technical delegate.
- **14.4 SENSOR SUPPORT** Mandatory use, vertical positioning using "blue bracket" (available at Sabiá Racing's store) on the front upper panel (tie) bracket rod as shown so that sensor closure plate faces down, and the retaining clip upwards.



**14.5 CUTTING EDGES** – Any sharp or pointed protrusion on the rear, which exceeds the rear bumper line, eg exhaust bracket, license plate bracket, etc. is prohibited.

Article 15: ENGINE

**15.1 BRAND** – Honda GX 390, rented by the organization.

**15.2 SPARK PLUGS** – will be provided by the organization, sealed and may follow the specifications: NGK BPR6ES, BOSCH sp43, GM PN 93206675. At any time the organization reserves the right to verify this component. Your change to a different specification of the above may cause the team to be disqualified.

## 15.3 DISTRIBUTION

**15.3.1** 02 (two) engines will be drawn and delivered for each team.





**15.3.2 500 LIGHT** – The engine will be sealed for each chassis, and spare engines will be available for replacement if the organization deems it necessary.

## 15.4 RULES OF USE

- **15.4.1 ENGINE CHANGE** Only with the permission of the Technical Delegate, and the changed engine will be available to the race organization, remaining sealed. Under no circumstances can the team personnel break the engine seal; the race organization staff is responsible for breaking and placing a new seal.
- 15.4.1.1 If case of problems at the time of grid formation, the kart will be brought to the pits, and will start the race after all karts have passed. If the engine is changed during the first fueling period prior of the start, the kart will start last. In case of engine change, it must be delivered to the event stewards.
- **15.4.1.2** The team may change the engine between the qualifying and the race, provided that the engine is from the team itself or from the predefined exchange team. In these cases the team will not be penalized.
- 15.4.1.3 If the team is not satisfied with the performance of the engine drawn, they may return the engine to the organization requesting the draw of another engine. After the engine has been changed, the team will not be entitled to use the returned engine. This returned engine will be equalized by the organization and placed back in the draw for other teams.
- **15.4.2 ENGINE EXCHANGE** Only teams that receive 02 engines will be allowed to exchange engines with 02 pre-selected karts until before the 1st free practice on 12/18/2019.
- **15.4.3 DAMAGE AND FAILURE** If the engine is damaged by accident, the team will be responsible for the cost of its maintenance.
- **15.4.4** Engines will be delivered to each team without a fixing base or clutch. The engines will be sealed by the organization, and breaking the seal for any reason without the organization's presence will result in team disqualification, even if this happens in practice.
- **15.4.5** Engines shall be returned to the organization after the last official practice; the same engines will be delivered the next day to their respective teams.
- **15.4.6** Full engine throttle is prohibited when the rear wheels are not on the ground; Failure to comply will result in a 5-minute penalty in free practice.





- **15.4.7** The organization reserves the right to inspect any engine at any time.
- **15.4.8** Teams that allow rainwater to mix with engine oil will have to bear the cost of changing the oil, and any other damage to the engine.

## **Article 16: OTHER EQUIPMENTS**

- 16.1 AXLE of unique specification, MEGA KGV model 2017/2018/2019. Axle change will only be authorized by the Technical Delegate in case of damage. The axles have the following specification: 50mm in diameter across, minimum thickness 2.5mm, length (1030 ± 5) mm, surface hardness (90 ± 3) HRB. Measuring the hardness of the axles can be part of the inspection at the end of Top Qualify and Race. In any case the axle hardness will be determined by averaging three measurements at different positions at the discretion of the Technical Delegate. At any time the Organization reserves the right to request the replacement of an axis that it deems necessary.
- 16.2 CLUTCH 41 teeth sprocket, 13 teeth pinion (93 / 98mm internal diameter drum) without rework, with iron skates Point Car brand, CBA approved, WITH SPRING CORE.



- **16.3 CENTRAL TANK AND MAXIMUM FUEL STORAGE CAPACITY** Original brand and model of chassis with a capacity of  $(8,0\pm0,5)$  l. The original tanks of each participating brand will be measured during practice and if it is impossible to install a tank of these dimensions on any chassis brand, its capacity will be equalized by the organization through visible mark that can be checked at any time during the event. This check also extends to fuel (fuel analyser).
- **16.3.1** Maximum fuel storage capacity of a kart including tank, hoses, filter (single) and breather reservoir shall not exceed 8.8L. Therefore:
  - The hose from the tank to the pump inlet (this hose extension includes the filter) must not exceed 125 cm.
  - The tank breather hose must not exceed 30 cm.





- $\bullet$  These hoses shall be made of translucent silicone or similar (10  $\pm$  1) mm outside diameter flexible hoses.
- 16.3.2 Any attempt to increase the maximum capacity through any additional component (extra hoses, extra reservoirs, use of other kart components as a reservoir, and tampering with the above components such as tank padding, hoses larger than specified etc.) will result in the team's imediate disgualification.
- **16.4 EXHAUST** Single model WACS KGV2018; no modification whatsoever will be tolerated. The replacement of the exhaust will only be allowed by the Technical Delegates in case of breakage; it must be purchased directly from the organization.

Due to the risk of exhaust rotation, resulting in damage to the rear plastic bumper due to hot exhaust gases, the Organization authorizes the use of heat deflectors or exhaust swing limiters to prevent the tip from facing the bumpers.



16.5 EXHAUST MANIFOLD ("CURVE") – It will be supplied by the organization together with the engine and cannot be modified whatsoever. Its replacement will only be allowed by the Technical Delegates in case of breakage. The organization reserves the right to conduct inspections during the race (without prior warning) to check for possible gas leakages. If the kart is identified as having any problem in this matter, it may be punished at the discretion of the race management.

NOTE: ANY FAILURE TO EXHAUST, EXHAUST MANIFOLD, ITS JOINT OR FIXING TO THE ENGINE, AT ANY TIME OF QUALIFYING OR RACE, IMPLIES A NON-CONFORMITY TO THIS REGULATION. TIME OF OCCURRENCE AND PENALTIES DURING QUALIFYING ARE DESCRIBED IN ITEM 5.4. FAILURES DURING THE RACE CAN BE CHECKED AT ANY TIME BY ANY COMMISSIONER. IF THE FAILURE RESULT IN NOISE CHANGING OR INCREASING THE KART WILL RECEIVE A BLACK FLAG WITH ORANGE CIRCLE, INDICATING THAT KART SHOULD MAKE A REPAIR (THAT SHOULD FOLLOW THE PROCEDURE IN THE ITEM 5.8) ANY KART WITH SUCH FAILURES AT THE END OF THE RACE WILL BE DISQUALIFIED.

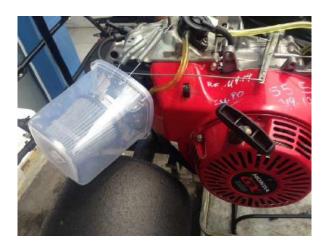
**16.6** OIL REFILLING AND DRAINING PLUG — The refill and drain plug will be sealed from the draw of the engine to the start of the race; the plug seal can only be broken after the start of the race by the team for checking and / or refilling with the semi-synthetic 10W40 specification oil. Should the engine fail due to lack of





lubrication, or any substance condemning the engine, or oil out of specification, repairs will be the responsibility of the team.

**16.7 FUEL FILTER** – It will be provided by the organization and no other filter will be allowed.



- 16.8 AIR FILTER It is mandatory to use the turbo air filter coupled to the engine in dry weather (model provided by the organization) and rain weather special protection in this condition (model provided by the organization). Rain filter is required when karting is equipped with WT (MG rain) tires.
- **16.8.1** The Event Organization will provide only one (1) rain filter per kart; if replacement is required due to its failure, the team must request replacement directly to the organization.
- **16.9 BRAKE DISC HOLDER** The use of 01 (one) extra hub against the brake disc holder is authorized to prevent its displacement in use.

## Article 17: 500 LIGHT - SPECIFICATIONS

Only teams previously registered with the race organization will be authorized for the provision of runway services in the Light category.

### Article 18: RADIO COMMUNICATOR

**18.1** The use of radio communicator of any model between driver and crew is prohibited. Apps only allowed on mobile phones, as long as they are securely attached to the wheel through proper support, which can be checked at any time and, if considered unsafe, have its removal requested.

## **Article 19: FIRE EXTINGUISHER**

A 4kg chemical powder fire extinguisher is mandatory in the team box, otherwise this team will not be able to compete at the event for safety reasons.





- Article 20: PENALTIES
- **20.1** HALF BLACK/HALF WHIT FLAG (UNSPORTING BEHAVIOR) The driver receiving this flag must do a 10-second Time Penalty.
- **20.2 TIME PENALTY** It will be fulfilled by the team in an area determined by the Race Director.
- **20.3 OVERTAKING UNDER YELLOW FLAG** HALF BLACK/HALF WHIT FLAG. There may be punishment.
- **20.4 OVERTAKING UNDER YELLOW FLAG DURING NEUTRALIZATION** HALF BLACK/HALF WHIT FLAG. To be fulfilled after restart.
- 20.5 TRACK CUTTING HALF BLACK/HALF WHIT FLAG.
- **20.6 TRACK INVASION** Team personnel who are not allowed to enter the track. They may be punished with a 1 minute TIME PENALTY for the team.
- 20.7 MANDATORY STOP I If the mandatory stop or Splash and Go time is not completely met, the team will be penalized with TIME PENALTY of twice (2X) the remaining time to complete the mandatory stop (eg a lap of 14:59 Time Penalty of 02 seconds, or a lap of 5:33 Time Penalty of 54 seconds). Exception made to the Safety Kart situation, as described in Article 5, item 5.10.8.
- **20.8 MANDATORY STOP II** In the event that mandatory stops are not met, within 05 minutes after the regulatory time limit, 11:40 am from the start of the race, the team will be penalized with Time Penalty of twice (2X) the time delay for completing the stop and must complete the lap together with TIME PENALTY.
- **20.9 MANDATORY STOP III** In case of non-compliance with the mandatory stops, within 05 minutes after the regulatory time limit, 10 hours for the 15 minute stops and 11:40 in the case of the 05 Minutes stops, from the start of the race, the team will be penalized with the addition to the final result of:
  - Mandatory 5 minute stop 09 laps per missed stop.
  - 15-minute mandatory stop 20 laps per missed stop.

**20.9.1 MANDATORY STOP IV** – The team is responsible for informing the Race Board if they missed the time of their 15 minute stop.





- **20.10 BOX** Karts that are stalled at the pits, unused, and the organization finds that it is being preserved to assist another kart on the track, may be excluded from the event and may not return to the track.
- 20.11 SCALES I— Assistance on the weighing platform and on the entire scales area is prohibited. (No staff member or helper may assist the driver and kart being weighed). Penalty HALF BLACK/HALF WHIT FLAG.
- **20.12 SCALES II** After being released from the scales, the driver should go at reduced speed, which will be evaluated by a steward. Karts that are deemed speeding by the stewards will suffer a 30-second Time Penalty.
- **20.13 DISRESPECT TO HALF BLACK/HALF WHIT FLAG** –Time Penalty 1 minute.
- 20.14 DRIVING WRONG-WAY IN THE BOX AREA WITHOUT PERMISSION OF A COMMISSIONER Time Penalty 1 minute.
- **20.15 RESCUING A KART ON THE TRACK** The team will be allowed to enter the track with a trolley only with the express approval of the Race Direction. Failure to comply will result in the 1 minute Time Penalty.
- 20.16 KART MAINTENANCE If a kart stops on the track during the race and receives outside help, it should go straight to the box; if you do not do so, you will receive a HALF BLACK/HALF WHIT FLAG.
- **20.17** For all stops in the maintenance area, including for time penalties, there may be an additional time to be added / fulfilled during the stop itself, which will be stipulated by the Race Board;
- **20.18 WEIGHT INFRACION** Any infraction due to lack of weight, the Team will be penalized as follows:
- 20.18.1 PRACTICES If a weight infraction (lower than minimum) of more than 5 kg is found in the box entrance scale, the team will be penalized with a 10-minute Time Penalty at the exit of the pits and their time will be removed from the timing. If weight loss is verified at the end of session, it will be penalized in the next session.
  - The Penalty will be served at a place determined by the organization.
- **20.18.2 QUALIFYING/ TOP QUALIFY –** The team will be excluded if, at the end, the kart/driver combo is lighter than the minimum weight by any amount.





- **20.18.3 RACE** The team will be punished as follows:
- **20.18.3.1** Lack of weight until 8.000g Time Penalty of 2 minutes, and the 3rd (third) penalty for lack of weight the team will be disqualified from the race.
- **20.18.3.2** Lack of weight above 8.000g or at the end of the race Exclusion of the race.
- **20.18.3.3** The organization may assess whether the rider will be excluded from the race if the rider loses a piece of fairing due to any impact, or visible breakage of a component, with a steward's permission.
- **20.18.3.4 PUSHING OTHER KARTS WHEN WEIGHTING LOWER THAN MINIMUM** The kart identified in this situation together with the one that was helped, both can be similarly penalized at the discretion of the Racing Board.

### 20.19 PENALTY - TIRES

- 20.19.1 No methods of heating (including rear tires by scrubbing) or artificial cooling of tires shall be permitted. Penalty HALF BLACK/HALF WHIT FLAG.
- **20.19.2 TIRES CHECKING ON BOXES ENTRANCE** All 4 tires will be checked any time a kart enters the pit area. If the organization fails to read the external or internal barcode, the team will be penalized with a 1 minute TIME PENALTY per unread tire.
  - Keeping barcodes in a readable state is the responsibility of the team. If it finds that the bar code is missing this condition, it must call on a Technical Delegate to make a new marking to avoid punishment for illegibility.
- 20.19.3 The application of additives or any other product on tires (externally or internally) for any purpose (altering the original tire characteristics, facilitating assembly, etc.) is prohibited. If this practice is identified the team will be disqualified from the race.

## 20.19.4 USE OF UNREGISTERED TIRES

When a kart is found to have used at least 1 (one) tire belonging to another kart (even from the same team) or another tire not registered to the kart, or in case of rain (as per item 13.4):

- a) FREE PRACTICE: Team may be excluded from that practice session
- b) QUALIFYING: will be disqualified and drop from the end of the grid. TOP QUALIFY kart will lose the right to take part, being disqualified and the next in the group will be promoted.
- c) ON RACE: regardless of the number of tires changed
- On first occurrence TIME PENALTY of 2 (two) minutes
- On the second occurrence 5 (five) minute TIME PENALTY
- On the third occurrence Event Exclusion

#### Article 21: RIGHT OF APPEAL AND COMPLAINTS





**21.1** Appeals and Complaints will be accepted by the race organizer within 1 hour after the official decision of the question has been notified.

### Article 22: MERCHANDISING

The distribution and sale of promotional and merchandising material on the premises of the Karting Track is prohibited, unless authorized by the organization.

Article 23: AWARDS

**23.1 500 MILES:** Prize will go to the top 06 of the race.

**23.2 500 MILES "B":** Awards will go to the first 06 of the category "B". The team in this category that climbs the podium will lose the right to climb the podium of category "B", passing the place to the next place in the category.

23.3 500 LIGHT: Prize will go to the first 06 of the category in the race.

The team in this category that climbs the podium will lose the right to climb the podium of the "Light" category, passing the place to the next place in the category.

