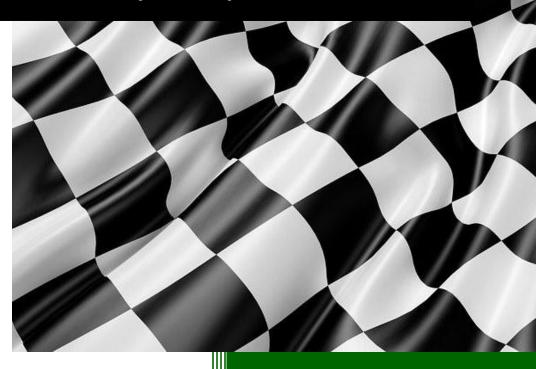




# **National Standing Supplementary Regulations**

## **Oval Dirt Championship**



Version 1 01 January 2024 Ref: 163162/144



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## DIRT OVAL RACING REGULATIONS - SOUTH AFRICA

THE CONTENTS OF THIS HANDBOOK TAKE EFFECT FROM 01 JANUARY 2024 AND ARE KNOWN AS THE *OT*'S (A.K.A. *SSR*'S)

MODIFIED SSR	DATE APPLICABLE	DATE OF PUBLICATION	CLARIFICATION
ALL HIGHLIGHTED	IMMEDIATELY	01 January 2024	WORDS ADDED

DO4SA RESERVES THE RIGHT TO MAKE CHANGES TO THESE RULES IN THE INTEREST OF SAFETY AND FOR THE IMPROVEMENT OF THE SPORT IN GENERAL. SUCH CHANGES WILL BE COMMUNICATED TO THE VARIOUS CLUBS (APPOINTED SECRETARIES) VIA ELECTRONIC MAIL IN THE FORM OF ADDENDUMS SHOULD THE NEED ARISE.

DIRT OVAL FOR SOUTH AFRICA ARE THE APPOINTED ADMINISTRATORS OF DIRT OVAL TRACK RACING IN SOUTH AFRICA BY MOTORSPORT SOUTH AFRICA, AND AS SUCH RECOGNISE MOTORSPORT SOUTH AFRICA AS THE OFFICIAL SPORTING BODY OF MOTORSPORT IN SOUTH AFRICA DULY AUTHORISED BY THE RELEVANT SOUTH AFRICAN GOVERNMENT APPOINTED BODIES TO ISSUE REGIONAL AND NATIONAL COLOURS.

DO4SA IS A COMPANY WHICH ADMISTRATES AND MANAGES THE ENTIRE FACET OF DIRT OVAL TRACK RACING IN SOUTH AFRICA ON BEHALF OF MOTORSPORT SOUTH AFRICA, AND AS SUCH HOSTS AND PRESENTS EVENTS AND IS SOLELY RESPONSIBLE FOR ANY AND ALL DISCIPLINARY AND MANAGERIAL FUNCTIONS DEEMED NECESSARY TO SUCESSFULLY HOST EVENTS IN THE SOLE OPINION OF DO4SA. NOMINATIONS FOR REGIONAL AND NATIONAL COLOURS ARE MADE BY DO4SA, ON BEHALF OF THE COMPETITOR, TO MOTORSPORT SOUTH AFRICA.

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## INCIDENT REPORTS, PROTESTS AND APPEALS

#### ANY COMPETITOR WHO WISHES TO PROTEST THE ELIGIBILITY OF A VEHICLE

- 1. Must complete a Protest Form and pay a protest fee (refer MSA GCR's PART IX PROTESTS, ROTEST FEES) to the race secretary of the meeting. The Protest Form MUST indicate exactly what part of the vehicle is specifically being protested, e.g. cams, cubic volume, weight, etc.
- 2. Must submit such protest to the Clerk of the Course (hereinafter referred to as the "COC") who will then inform and instruct the DO4SA-appointed Technical Consultant (hereinafter referred to as the "TC") to inspect such vehicle.
- 3. Must submit such protest before the scrutineering period for all classes of the day is over.
- 4. Shall receive from the club secretary a receipt which will be attached to the protest form.

Any vehicle which has been protested for eligibility (for being legal) may compete under protest. Should it be found to be legal, then all points attained for the night will be awarded to the competitor, alternately the competitor shall receive zero (0) points for the event in question.

The vehicle inspection shall be completed as soon as possible and shall be accompanied (guarded to protect against corrective tampering) by a DO4SA official from the time of protest until the findings of the TC. The vehicle may be locked away securely by DO4SA or its duly appointed representative (TC) to prevent any tampering by the competitor and/or anybody else until all necessary measures have been taken to establish the findings of the protest.

## ANY COMPETITOR WHO WISHES TO PROTEST THE DRIVING CONDUCT OF ANOTHER COMPETITOR:

- 1. Must first complete an Incident Form and spike the incident form onto the spike / or place into a "tube/container" provided near to the COC by the Promoter.
- 2. May leave a person appointed by the competitor to hand any video footage which the competitor may have to strengthen his/her case to the COC.
- 3. May protest the decision of the COC with regards to the Incident Form.
- 4. Must complete a Protest Form and pay a protest fee of (R5000-00 for National and all other events R2000 refer MSA GCR's PART IX PROTESTS, ROTEST FEES) to the race secretary (who shall issue a receipt) of the meeting. The Protest Form MUST indicate exactly which competitor (Car Number), class, heat and lap the incident took place in.
- Must indicate on the Protest Form exactly which OT was contravened and how he/she was affected.
- 6. May only protest the competitor who was in front of him/her in the lap in which the incident took place.
- 7. Must hand-in the Protest Form with a receipt to the COC within one hour of the finishing of the final heat of the last class of the night.

In the event of a protest being received within one-hour (30-minute cool-off period plus 30-minute protest time) of the last race of the night, the points of that specific class will be withheld until the issue is resolved.

The protest shall be heard by the Do4sa Steward (and his/her assistants and/or observers), and the competitor shall be notified of the decision. This notification shall be in the form of a written outcome on the Protest Form.

Should the competitor not be satisfied with the outcome of the protest, he/she has **one final** opportunity to appeal the decision of the Do4sa Steward. Such Appeal shall be the final opportunity for the incident to be reexamined by a panel of experts appointed by DO4SA. The outcome of such appeal shall be full and final, and there shall be no further recourse / option available to the competitor to apply for leave to appeal to MSA. *"The buck stops with DO4SA"*.

## ANY COMPETITOR WHO WISHES TO PROTEST A DECISION OF THE CLERK OF THE COURSE REGARDING A RACING INCIDENT / CONDUCT

- Must complete a Protest Form and pay a protest fee (R5000-00 for National and all other events R2000 refer MSA GCR's PART IX PROTESTS, ROTEST FEES)) to the race secretary of the meeting (who shall issue a receipt). The Protest Form MUST indicate exactly which decision is being questioned and with regards to which competitor the decision was made / altered.
- 2. Must indicate on the Protest Form exactly which OT governs this decision and how he/she was affected.
- 3. May only protest in good faith and in the fair spirit of good sportsmanship. Any protest which is not in the spirit of good sportsmanship (in which an outcome is possible within the ambit of this rulebook) shall be deemed to be null and void, and the monies paid shall be retained by DO4SA.
- 4. Must hand-in the Protest Form with a receipt to the COC within one hour of the finishing of the final heat of the last class of the night.

In the event of a protest being received within one-hour (30-minute cool-off period plus 30-minute protest time) of the last race of the night, the points of that specific class will be withheld until the issue is resolved.

The protest shall be heard by the Do4sa Steward (and his/her assistants and/or observers), and the competitor shall be notified of the decision. This notification shall be in the form of a written outcome on the Protest Form.

Should the competitor not be satisfied with the outcome of the protest, he/she has one final opportunity to Appeal the decision of the Do4sa Steward. Such Appeal shall be the final opportunity for the incident to be reexamined by a panel of experts appointed by DO4SA. The outcome of such appeal shall be full and final, and there shall be no further recourse / option available to the competitor to apply for leave to appeal to MSA. "The buck stops with DO4SA".

#### ANY COMPETITOR WHO WISHES TO APPEAL THE OUTCOME OF A PROTEST

- Shall submit their appeal within seven calendar days of being notified (via electronic mail) of the outcome
  of their protest to DO4SA via electronic mail to the e-mail address which can be obtained from the DO4SA
  Secretary (contact number on this letterhead).
- 2. Shall submit all relevant documentation and video footage (if any) to DO4SA for submission to the Court of Appeal (hereinafter referred to as the "COA") members, which shall be made-up of at least one of the Stewards present on the night of the incident, as well as at least two other experts and at least one DO4SA representative. The COC shall not be allowed to discuss the case with any of the court members at any time. Stewards are to ensure that they refrain from listening to, or participating in discussions about, the incident at any time failing which they shall not form part of the COA. The competitors involved in the incident, as well as the COC shall be summoned to give testimony at such hearing, but shall have no other input whatsoever.

The findings of such Appeal shall be communicated to the competitor and all present at the COA via electronic mail. These findings are final and no further remedy is available to the competitor.

Should the competitor be successful in their Appeal and/or Protest, all monies paid over to DO4SA shall be refunded to them, failing which DO4SA shall retain the money and use it towards development of the sport. The outcome of such appeal shall be full and final, and there shall be no further recourse / option available to the competitor to apply for leave to appeal to MSA. "The buck stops with DO4SA".

## APPLICATION OF THE GENERAL COMPETITION RULES (GCR'S) OF MSA

These Standing Supplementary Regulations are referred to as "OT's" (Oval Track) and should be read in conjunction with the relevant GCR's. Importantly, please refer to GCR 225, which states: Where there is a contradiction between the GCR's and the SSR's (in this case oval rule book), the latter take precedence except where the category regulations provide otherwise. This does not apply to international events, which are run under the relevant International Sporting Code.

GCR 226 states: In interpreting motorsport regulations and specifications "what is not specifically permitted is disallowed (not allowed)" is the normal concept in keeping with the French regulations on which all motor sporting regulations are based.

## STANDING SUPPLEMENTARY REGULATIONS FOR DIRT OVAL RACING IN SOUTH AFRICA

#### OT1. COMPETITORS

- 1.1 ACTIVE COMPETITORS: shall mean a competitor who has participated in at least sixty percent (60%) of the events organised by the venue where he/she is registered within the relevant season which is deemed to be a period of 12 months backwards from any given date. Where such club presents in excess of twenty events per year, the competitor shall compete in at least 12 events in order to be regarded as an active competitor. A competitor shall always have one home-base whose events take preference over any other events. Should a competitor choose to join a second club (to compete for a championship / series), such competitor shall first and foremost be an active competitor at their home-base club before competing at his/her second club. For purposes of this definition, "participate" shall require the competitor concerned to have taken a green flag (starting order) for at least one heat in a given event.
- 1.2 LICENSES are issued by MSA on application via their website <a href="www.motorsport.co.za">www.motorsport.co.za</a>. Upon receiving such license, the competitor shall forward such, along with a signed and dated DO4SA Code of Conduct to his/her home-club's secretary. Please refer to part V of the MSA GCR hand book.
- 1.3 ROOOKIES: Aspirant competitors who have no, or little, previous race experience will not be allowed to participate at Regional or National level until he/she has successfully competed in at least 3 club races. Such rookie shall be obliged to mark his car so that officials and fellow competitors can be easily aware of his rookie status by means of an "X" on the bootlid.
- 1.4 MINIMUM AGES: All competitors under the age of 18 years old shall need the permission of their guardian to compete. The minimum age for the senior classes (Stockrods, 1660, 2.1, Hotrods, Midgets, Heavy Metals, American Saloons, Late Models) is 15 years of age, with experience in Karting or any of junior Do4sa classes. The competitor may be required to qualify (time trial) for senior classes on a day/night during which there is no official racing (usually during a practice session) before being allowed to compete in a race. No competitor under the age of 15 will be allowed to participate in the senior classes. A competitor may take part in the junior class( rookie class/ jnr hotrod class or beginners class) from the age of 10 to 15 years. No one is allowed to race under the age of 10 years in a junior class. Once the competitor turn 15 years and move out of junior class, he or she is not allowed to participate in the junior class again.
- 1.5 MOVEMENT OF COMPETITORS BETWEEN CLUBS / ASSOCIATIONS: The object of this rule is to provide for an orderly movement of competitors in respect of how and where they register and race.
  - i) DOMICILE: Each competitor shall select the venue closest to his/her permanent residence which

offers the specific formula in which he competes as a "home base".

- ii) CHANGING CLUBS: Once a competitor has joined his/her home base he/she may not leave that home base and join another club. Should the relationship between the club and the competitor be of such a nature that it is beyond repair, the driver has the option of a written request to move to another club. The written request will be forwarded to Do4sa for final approval. The office bearers of the prospective club shall ensure that the competitor concerned is in possession of a letter releasing him from his previous DO4SA home base commitment.
- iii) DECLINING MEMBERSHIP: Should the closest Club decline a membership application, the competitor shall be afforded the opportunity to join another the next closest club. The club Which denies membership may only do so on the grounds that the competitor has a history of negative / bad behaviour at events or on social media, etc.
- iv) SERVING OUT A SENTENCE: A competitor shall not be entitled to change club until the conclusion of disciplinary action described above. The competitor shall remain subject to the constitution of the club concerned for that period. A competitor will only become entitled to release from his club once any period of suspension imposed on him has been served
- v) DISPUTES: Where a dispute arises between a competitor and his club, concerning the resignation of such member, such dispute shall be resolved in terms of the grievance procedures of the club concerned. If such steps do not resolve the dispute the Regional DO4SA Committee concerned shall act, as arbitrators in the matter, and their ruling shall be final.
- vi) FREEDOM TO COMPETE: Clubs, organisers, and promoters may not under any circumstances restrict a competitor from taking part in other DO4SA events, unless there is a prior home-base commitment. The hosting organisers may only accept entries from guest competitors if they have satisfied themselves that the competitor concerned does not have a prior racing commitment to his home base or is in possession of written permission to participate in the event concerned. All competitors are obliged to inform their home club/association, in accordance with that organisation's prescribed communications channels, of their intention to take part in any events not inscribed on the home base calendar. This sub-rule shall not apply to regional and national championship status events. Red / Yellow cards or a specific sentence which has been imposed on the competitor overrules this sub-rule.
- vii) OE (ONE-EVENT) LICENSES: Competitors have to belong to a DO4SA Club (closest to their home-address) before applying for a OE license. Furthermore, competitors need to enter via their home-club to participate using the OE License.

#### 16 GCR'S TO TAKE NOTE OF WITH REGARDS TO COMPETITOR LICENSES:

- i) GCR 127 c This GCR covers all aspects which a competitor has to satisfy DO4SA with before being eligible to compete at Dirt Oval Racing events in South Africa;
- ii) GCR 130 iii & iv parents of Junior competitors ("minors") should take special note of (iv).

#### OT2. DATE ALLOCATION

- 2.1 All clubs shall submit their dates for the coming season to DO4SA, who shall in turn submit such dates to MSA.
- 2.2 National and Regional status events shall always take precedence over Club status events.
- 2.3 Clubs should avoid clashing with each other unless they have agreed that such clash is unavoidable and in the best interest of the sport.

#### OT3. LICENSING AND GRADING OF TRACKS

- 3.1 REGISTRATION: All tracks shall register with DO4SA, and shall adhere to the Track Safety Guide.
- 3.2 TRACK SAFETY: Each track shall complete, sign and submit a Track Safety Inspection Sheet to DO4SA. Such sheet shall be deemed to be accurate and shall form the basis of the "safety" portion of any claims which may rely on such information.
- 3.3 TRACK GRADING: Venues shall be graded according to their suitability to host Club/Regional or National / International events.
- 3.4 GENERAL LICENSING AND GRADING INFORMATION: DO4SA reserves the right to inspect the track at anytime during the currency of a license. If, as a result of such inspection DO4SA is of the opinion that the track is unsafe or unsuitable for racing in any respect then, notwithstanding any previous inspections or representations to or by DO4SA as to the suitability of the track, DO4SA will have the right (but not obligation) to retract this license. Such retraction may take place with immediate effect in the event of circumstances of urgency. In such circumstances the licensee will be allowed to make representations for the reversal of such retraction. Otherwise such retraction will only take place after notification to the licensee granting the licensee a period of 14 days in which to remedy any defect in the track or to submit representations to DO4SA as to why the license should not be revoked. Neither DO4SA nor the appointed track inspector does, by the issue of a license or a grading, acknowledge or undertake any liability whatsoever for, or any approval of, the safety precautions or other precautions taken in regard to competitions, the circuit, races, vehicles or anything connected therewith. They shall not be liable to the promoters or organisers, or to any other person whatsoever, for any loss, injuries or damages whatsoever which any person or party may suffer arising from, in connection with or in relation to events held at the licensed track.

#### OT4. TRAINING AND GRADING OF OFFICIALS:

- 4.1 GRADING: Clerks of the Course (COC's), Observers, Stewards, Technical Consultants (TC's), Scrutineers, Lap-Scorers, Starters and Marshals shall all be licensed and be graded as follows:
  - i. NATIONAL GRADE —which shall allow the official to take charge of the particular function at ANY event;
  - ii. CLUB GRADE which shall allow the official to take charge of the particular function at events with CLUB Status; and
  - iii. NOVICE GRADE which pre-supposes that the official has a working knowledge of the rules and the position concerned shall allow the official to officiate under the tutorship of an official at club events. The object of this grade is to allow a person to buy insurance and participate in the administration of the sport legally while undergoing training.
  - iv. All officials will be subject to ONGOING REVIEW at regional sub-Commission level as follows:
  - v. DO4SA will grade officials on a MERIT BASIS and submit such grading to MSA.
  - vi. DO4SA reserves the right to "DOWNGRADE" any official at any given moment should it deem such action necessary. The degrading of an official will not be entered into lightly, and will only be official following agreement between at least two members of the DO4SA Committee plus the Chairman.
- 4.2 TRAINING: DO4SA will, via its various clubs, provide an opportunity for aspirant officials to shadow officials. All officials as well as their "Shadow" need to be licensed by MSA and have medical cover. All officials also to sign-on in the register before the start of each event.
- 4.3 EXAMS: Clerks of the Course (COC's), Observers, Stewards, Technical Consultants (TC's), Scrutineers and Lap-Scorers are all required to write the appropriate exams for their designation as follows every 3 years:
  - i) COC GCR's and OT's: CoC, Lap-Scoring and Scrutineering Exam
  - ii) OBSERVERS OT's and CoC Exam
  - iii) STEWARDS GCR's and OT's: CoC ,Lap-Scoring and Scrutineering Exam
  - iv) TC'S GCR's and Scrutineering Exam
  - v) LAP-SCORERS GCR's and Lap-Scoring Exam

Marshals and Starters need not write any exams, but will be trained by each Club by their appointed person annually.

NB: Exams can be written online at www.dirtovalsa.co.za

Any official who places himself at the disposal of an organiser who does not have an organising permit issued by MSA may be suspended, at the sole discretion of MSA.

For Regulations pertaining to "Necessary Officials", refer to GCR149 in the MSA Handbook.

4.3 POWERS, DUTIES AND PLACEMENT OFOFFICIALS This rule is to be read in conjunction with Part VII of the MSA Handbook – which has for your convenience been printed as an annexure to this set of regulations. It is important to note that every person that officiates at events must be licensed, graded and registered with MSA. This requirement relates to insurance issues as well as to jurisdiction issues as a person who is not a recognised official would have no power to make decisions.

- i) No official may compete in any event where he is an official without specific written permission from DO4SA. It follows that he/she cannot officiate in a class in which he/she competes. This dispensation can only be allowed at club events.
- ii) All officials shall, bearing the nature of the sport in mind, exercise extreme care in the fulfilment of their duties and no official may expose himself to any hazard that is not essential to the performance of his duties. The positioning of the officials below is considered ideal and shall apply to all National Championship events.
- iii) The Race controllers (collective term for Clerks of the Course and Stewards) shall:
  - a) Make all decisions with the least amount of delay and communicate same to the competitors and officials in the appropriate fashion;

- b) Officiate from an elevated position where they are best able to view the racetrack. One clerk should be posted on the start line so that all flags, instructions, penalties, reprimands and warnings that need to be conveyed to the competitors and officials can be channeled through him. The clerk of the course posted on the start line may also act as the starter, provided he is not solely in charge of the particular race.
- c) Be in constant radio (or other) contact with at least the 3 circuit marshals described in OT4.3 (xii) below who shall act as observers), the chief marshal, the commentator, the pit gate marshal, the chief lap scorer, the starter and the start line clerk.
- d) Make themselves available to view, and make decisions based on, Incident Reports from competitors for the purposes thereof during the event and specifically after the event for protests.
- e) Carry out the duties of the Clerk of the Course and Stewards (see GCR 151-157) apart from each other, bearing in mind that:
  - -Competitors are entitled to fair, unbiased hearings at all levels; and
  - -Clerks of the Course may, once they have exhausted their powers, refer matters like dangerous
    driving to the Stewards for the purpose of an increased penalty. please see GCR 156
    (viii) in this regard as well as the overriding provisions of OT36.
- f) Hear the protests of competitors and make all decisions that would ordinarily be the responsibility of the stewards with care to avoid that input from those having conduct of the races do not taint the objectivity of those who would need to hear such protest. The Clerk of the Course who had control of the race shall not be privy to the deliberations concerning a protest. He shall obviously give evidence and reasons for a decision he may or may not have taken.
- g) Consist of a body of at least 5 people made up as follows:
  - A single Clerk of the Course;
  - Two assistants; and
  - Two stewards.
- h) Ideally be assisted by a reserve Clerk of the Course, who would be able to assume the duties of the Clerk of the Course should it become necessary for the said Clerk to address a problem or incident.
   Promoters must realise that the benefits of having sufficient experienced personnel to ensure the smooth running of events far outweighs
- i) the increased cost of a reserve person. At club level use of an experienced marshal would be acceptable, provided the Clerk of the Course has given the said marshal clear instructions regarding the resolution.
- j) Have the following grading for Club level:
  - The Clerk of the Course minimum of club grading;
  - Two assistants minimum novice grade clerk of the course; and
  - Two stewards one at the same level as the Clerk of the Course and the other at the same level as the assistants.
- k) Have the following grading for events with status of higher than Club level:
  - The Clerk of the Course minimum National grading;
  - Two assistants minimum club clerk of the course grading; and
  - Two stewards one at the same level as the Clerk of the Course and the other at the same level as the assistants.

#### iv) The appointed Clerk of the Course shall:

- a) Assume full executive responsibility for the specific race;
- b) Exclude, reprimand or fine competitors when called upon to do so in these regulations;
- c) Shall supervise the starter in respect of the starting procedure and the number of laps run;
- d) Ensure that all signals are conveyed to competitors in a clear manner; and
- e) Be responsible for the administrative and reporting duties that are allocated to Clerks of the Course by these rules and GCR 151 to 154 and GCR 156 and 157 of the MSA handbook to the extent that those duties and powers are not in conflict with other stipulations of these rules;

- f) Address the gueries from competitors in terms of the guery procedure detailed above.
- g) Ensure that the entire infrastructure required to present an event is in place before the commencement of the practice session or racing at such event;
- h) Ensure that the race regulations detailed elsewhere in these rules are dealt with consistency and even-handedness; and
- i) Note the input of his assistants and the input in making decisions or taking action.
- v) The **Assistants to the Clerk of the Course** who has / had control of the race shall:
  - a) Have primary duties of invoking caution flag, full caution / safety flag or race stoppage (red flag) procedures regarding an incident in his sector of the track and reporting factual accounts of general racing incidents to the Clerk of the Course who has control of the race; and
  - b) carry out the duties of marshals once there has been a stoppage or incident.
- vi) The **Stewards** shall carry out the duties as per GCR 151-157 as well as further duties allocated to Stewards in terms of these OT's.
- vii) The Starter shall:
  - a) Ensure that the races are correctly started and finished as set out in the regulations;
  - b) Ensure that the means of starting, whether they be lights or flags, are in good working order;
  - c) Receive the competitors from the marshal concerned and apply the start procedure;
  - d) Only act in accordance with instructions given to him by the Clerk of the Course;
  - e) Ensure that the correct number of laps are run; and
  - f) In conjunction with the Clerk of the Course ensure that the correct signals are given.

#### viii) The Scrutineer(s) shall: -

- a) Not scrutineer any vehicle taking part in the event belonging to himself or any family member, nor may he/she scrutineer any vehicle from that particular class;
- b) Carry out the duties stipulated in GCR's 166, 252, 253 and 254 of the MSA handbook;
- c) Re-examine any vehicle that was involved in an incident that caused structural damage to
- d) the vehicle and was serious enough to prevent the competitor in question from completing
- e) the race or practice;
- f) Re-examine any vehicle as and when instructed to do so by the Clerk of the Course, stewards or Technical Consultants;
- g) Examine vehicles for compliance with the construction and class regulations, applicable specific regulations that may apply to the event, championship series or other series of events;
- h) Specifically ensure that brakes are tested and found to be operational;
- i) Examine vehicles for compliance with the sponsorship advertising requirements stipulated in the SR's of the event;
- j) Ensure that the time at which the vehicle passed scrutiny is noted in the competitor's scrutiny book;
- k) Ensure that the competitor has completed documentation;
- 1) Notify the competitor of any fault that be have been detected;
- m) Afford the competitor an opportunity of remedying such shortcoming by no later than 30minutes after the end of documentation or scrutiny;
- n) Reflect all faults in the competitor's scrutiny book and submit a report, listing all the faults located, to the Clerk of the Course, before the commencement of the racing;
- o) Affix a scrutineering sticker to each vehicle that has passed scrutineering;
- p) Have the authority to reject any competitor's vehicle, that does not comply with the regulations;
- q) Be responsible for the Parc Ferme and other designated areas used during pre-race and post-race examination of cars; and
- r) Not convey any information obtained at scrutineering to any person other than competitor concerned, the Clerk of the Course or the Technical Consultants.
- s) Ensure that all tyres are marked, if required, and checked during the event.
- t) Satisfy himself, by taking into account details of their design and construction, that vehicles are: -
  - Suitable for racing in respect of the safety requirements stipulated in these rules;
  - Apparently eligible for the class of racing entered; and

- Present no hazard to the competitor, another competitor, or other vehicles.
- Have regard to the content of the competitor's scrutineering book, a static examination of the vehicle as well as the performance of the vehicle in any official practice period or race in formulating his opinion about compliance with the regulations;
- v) Require a competitor to seat himself in the vehicle to determine the suitability of safety features such as the roll cage and the safety belts;
- w) Ensure that vehicles meet the requirements in respect of the size and eligibility of the numbering;
- x) Check the competitor's ability to evacuate his race car;
- y) Specifically check the condition and fittings of all fuel hoses both feed and return lines; and
  - check the competitor's compliance with the regulations in respect of safety clothing by having Specifically the competitor clothe himself with the gear presented.

### ix) The *Timekeeper* shall: -

- a) Be seated in such manner that it is possible to accurately measure the time taken by the competitor to complete a lap; and
- b) Carry out the duties set out in GCR 163.
- x) The Lap scorer shall:
  - a) Record the competitors' positions at the end of each lap of each race of the event;
  - b) Record the results of each race;
  - c) Be positioned in line with the start/finish line, with a clear view of the line;
  - d) Complete result sheets for distribution to competitors throughout the event or as set out in the SR's for the event;
  - e) Bring into account any deduction of points, exclusion(s) or re-instatement(s) ordered by a competent official; and
  - f) Prepare the result sheets to be posted at the end of the event.

#### xi) The Chief Marshal shall: -

- a) Have overall responsibility for the marshals at each event;
- b) Ensure that the track surface, markings and protective works are maintained in good order
- c) throughout the meeting;
- d) Ensure that the firefighting equipment is readily available and correctly sited and that his assistants and the paddock marshal are familiar with its operation;
- e) Ensure that there are sufficient brooms, spades and cement available on tar tracks;
- f) Supervise the removal of any vehicle which may have stopped on the circuit from the track;
- g) Ensure that all entrances to the track proper are manned and that no unauthorised person enters this area;
- h) Ensure that at a sufficient amount of marshals (wearing distinctive vests or uniforms) are present throughout racing; and
- i) Take charge of the recovery vehicle operations.

#### xii) The Marshals are divided into three distinct groups being: -

- a) Circuit Marshals who are primarily involved in *communication* between the competitors and the race officials by being responsible for the operation of the lights and flags as well as being responsible for communicating whether or not competitors who through accident have come to a standstill against the barrier wall are in need of medical assistance. They can also act as observers.
- b) Arena Marshals who are responsible for the rendering of assistance to competitors, removal of vehicles, cleaning of the track and its verges and will be deployed from the center of the arena. They shall also assist the scrutineers with the control of Parc Ferme after the completion of the racing.
- c) Gate, Paddock and Line-Up Marshals who are responsible for controlling the line-up, entry and exit of competitors to and from the pits.
- d) The Chief Marshal shall be positioned on the infield.
- e) The *Circuit Marshals* shall be posted as follows:
  - One marshal on each of the two corners with the clear understanding that this marshal shall relocate himself when the direction of racing is changed. It is desirable that this marshal is placed behind the safety wall/debris fence. Should these marshals be placed on the infield they

shall be stationed within a suitably constructed tyre barrier at the approach to each of the four corners. As stated it is expected that the marshal will relocate upon a change in the direction of the racing; and

• Another on the back straight directly opposite the start/finish line.

#### f) The *Circuit Marshals* shall:

- Carry out the duties set out in GCR 170 of the MSA handbook;
- Pay close attention to the racing on the track;
- Show the appropriate warning signs to the competitors in respect of dangers in the sector of the track under his control;
- Be on the lookout for races that have been stopped or placed under safety flag conditions (full course yellows) and convey that information to the competitors;
- Immediately ascertain if a competitor is injured in an incident in his vicinity, in which case he shall show the appropriate signal; and
- Report factual accounts of incidents, accidents, offences or breaches of regulations to the Clerk of the Course.
- g) The Arena Marshals shall be positioned as follows:
  - Two marshals (response marshals), one of whom may be the driver, on a response vehicle that should be parked on the infield in a ready to go situation. The response vehicle should at the very least be equipped with revolving amber lights although it is preferable that they have the ability to switch on a red revolving light as well. Where the
  - layout of a circuit permits ambulances and other response vehicles to park on the infield without
    posing a danger to the said vehicles, the rescue staff or competitors and does not interfere with the
    sight of the race officials the marshals may be deployed from one of these vehicles.
  - Sufficient marshals to attend to cleaning of the track and removal of vehicles shall be based on the infield, behind the tyre barrier.

## h) The arena marshals shall:

- Remove vehicles that have stopped in his vicinity from the track when it is safe to do so;
- Assist with crowd control, where necessary;
- Carry out any instruction given to him by any member of the medical organisation, the chief marshal, the Clerk of the Course or the stewards:
- Remove all debris from the racetrack when it is safe to do so;
- Attend to the sweeping of tar tracks and the laying of cement, in case of an oil spillage, as soon as it is safe to do so.

## i) The *response marshals* shall:

- Be on the lookout for emergencies that require their attention;
- Respond to such emergency as soon as is possible, always having consideration for the safety of all involved;
- In conjunction with (and acting in terms of instructions given by) the medical staff be responsible for assisting in the removal of competitors from vehicles;
- Be responsible for the fire-fighting services on the track and shall be trained as such; and
- Ensure that they have the required safety equipment and clothing to render their services.
- j) The *gate marshal* shall be responsible for opening and closing the gates in terms of the instructions given to him and shall operate the gates in a safe manner.
- k) The Pit line up marshal shall place the cars in the dummy grid whilst the on circuit line up marshal shall ensure that the vehicles are in their correct order and shall be responsible for setting out vehicles on restarts and when safety status is withdrawn. The start line Clerk of the Course may fulfil the role of on circuit line up marshal.
- I) The Chief Paddock Marshall and his team shall: -
  - Maintain orderly conduct in the paddock and/or pit area;
  - Notify the competitors to assemble in their respective grid positions on the dummy grid, prior to each heat;

- Notify the Clerk of the Course (and through him the organisers) of any refueling system that is unsafe or hazardous in his opinion;
- Ensure that no competing vehicle goes onto the track unless it has been approved by the Scrutineers;
- Ensure that the pit gates are closed and secured; and
- Receive the names of all withdrawals and convey them to Clerk of the Course/Lap scorers.

#### m) The Secretary of the Meeting shall: -

- Carry out the duties set out in GCR 159;
- Ensure that all competitors have signed the entry sheets;
- Record the time of entry of each competitor, who shall countersign same;
- Ensure that all officials have completed the sign on sheet;
- Ensure that competitors comply with specific eligibility regulations that may apply to that event, championship or series of events; and
- Ensure that all competitors and their crews are issued with the applicable means of pit entry (gained in theory or practice) to enable them to check compliance with specifications;

#### n) The *Technical Consultant/team* shall: -

- Consist of a person or persons, approved by DO4SA, who hold suitable qualifications
- Carry out all the measurements and inspections required to determine whether or not a particular vehicle complies with certain specific limitations at the request of DO4SA, the Organisers, the Stewards or the Clerk of the Course;
- In conjunction with the Scrutineers, Organisers and the Clerk of the Course be responsible for the management of the post event procedure regarding technical compliance;
- Have the powers to exclude, fine or penalise a competitor for technical infringements provided that
  the Technical Consultant is duly instructed by DO4SA, the Organisers, the Clerk of the Course or the
  Stewards;
- Report their findings, which shall include details of the action that the technical team have taken or propose to take against the competitor, to the Clerk of the Course and the competitor concerned as soon as possible after the completion of the examination.
- Observe all races at the event and advise the Clerk of the Course of the identities of competitors whose performance gave rise to doubts about their compliance with technical regulations in respect of the vehicle campaigned by them.
- o) The *environmental officer* whose functions are set out in the relevant MSA codes; and
- p) The *alcohol/drug control officer* whose functions are set out in the relevant MSA codes.

<u>NB</u>: DO4SA will appoint, at its own discretion, a DO4SA Representative who will ensure the smooth-running of events, and will be empowered by his/her appointment to overrule any decisions made by officials on the day which are seen to be bad for the sport in the exclusive opinion of such duly appointed official.

#### OT5. PIT-CREWS:

- 5.1 Pit crews shall:
  - i) Not be allowed on the track unless they have the prior approval of the Clerk of the Course;
  - ii) Conduct themselves in an orderly manner. Any disorderly conduct, failure to obey official instructions or breach of these rules may render the pit crew and the competitor they pit for liable to disciplinary action by the Organisers, Clerk of the Course, Stewards, or MSA as the case may be.
  - iii) Not interfere with any official, nor shall involve themselves with any derogatory action, sign or proceeding against any such official;
  - iv) Not consume alcohol immediately prior to the event or while participating in an event.
  - v) Not assist or aid any unauthorised person to gain access to the demarcated pit area;
  - vi) At all times display the identification utilised by the organisers of the event in question;
  - vii) Not touch a competitor's vehicle while it is on the racetrack; and
  - viii) Not make a fire or have an open fire in the pits

#### OT6. FLAGS AND WARNING SYSTEMS

- 6.1 The minimum size of a flag is 60 cm x 80 cm. Flags shall be mounted so that they can be easily and safely handled by all officials.
- 6.2 The flags shall be stored in holders adjacent to the official's post.
- 6.3 The use of lights is recommended, especially if racing takes place at night. The lights should be of good quality, must be visible and must be safely placed. The lights should be placed at the end of the straights as well as in the middle of the straights. It is considered ideal if the lights are operated from a central position, preferably close to the position of the Clerk of the Course.
- 6.4 The regulations only refer to the use of flags. It goes without saying that the lights corresponding to the particular flag should be used. The light stipulated as a replacement for each of the flags is discussed within each section of flags below.
- 6.5 When these regulations require a flag to be deployed the previous flag shall be withdrawn if it is still being shown
- 6.6 The following flags are compulsory at all events:

## I. START FLAG

- a) The flag utilised shall be the MSA flag.
- b) The flag shall be operated by the starter in accordance with the instructions contained in the rules regarding starting.
- c) The flag may be replaced by a light arrangement, provided that an orange light shall indicate the fact that the competitors are under starter's orders in place of the raising of the flag concerned. The actual dropping of the flag may be replaced by the illumination of a green light. These lights shall be in a robot arrangement.

## II. WHITE FLAG

- a) The flag is shown from the start / finish line.
- b) The flag is operated by the starter to indicate: -
  - That the start procedure is about to commence; and
  - The commencement of the last lap.
- c) The flag is held in a stationary position.
- d) A flashing white light or stationary white lights around the circuit may replace the flag.

## III. FINISH FLAG

- a) The flag utilised shall be a black and white chequered flag.
- b) The flag shall be displayed at the finish line until all the competitors have completed the race.
- c) The flag shall also be operated by the starter.

#### IV. GREEN FLAG

- a) The green flag has many uses, depending on the circumstances in which it is shown.
- b) The flag generally means that all is clear racing can start or continue.

- c) Marshals shall not be permitted to operate the green flag on the circuit during the race. They shall however be permitted to signal an "all clear" sign to the chief marshal with the flag between races.
- d) The chief marshal shall indicate the fact that all is clear to the starter and the Clerk of the Course by raising the green flag.
- e) The flag may be replaced by a green light.
- f) The starter in turn has numerous reasons for displaying the green flag, being: -
  - To signal to competitors that the track is clear to start warm up laps.
  - To signal to competitors that a race being raced under safety (yellow flag) can be restarted.
- g) The operation of the green flag, by the starter, shall be the same as the starting flag.
- h) The said green flag may be replaced by the light arrangement referred to in the starting flag section above.

#### V. YELLOW WITH RED STRIPES FLAG

- a) The flag is utilised by the circuit marshals to indicate a change in or on the racing surface or an obstruction.
- b) The flag may accordingly be utilised to indicate obstructions and for instance very wet patches on dirt circuits as well as water, oil, sand or other material on a tar circuit.
- c) Competitors are expected to familiarise themselves with the circuit, as the flag need not be shown for the whole race.

#### VI. BLACK FLAG

- a) The flag shall only be shown from the start finish line. The flag shall be shown by the Clerk of the Course or on the instruction of the Clerk of the Course by the starter..
- b) A competitor being shown the said flag shall stop immediately, having been disqualified by the Clerk of the Course.
- c) The flag shall only be utilised by the Clerk of the Course after he has considered all other options available to him. It is recommended that Clerks of Course utilise the various other regulations at his disposal before deploying the above flag.
- d) It should be noted that it is almost always advisable NOT to use this flag while racing is on.

## VII. BLACK AND WHITE FLAG

- a) The flag shall be divided into black and white halves diagonally.
- b) The flag shall only be shown from the start finish line. The flag shall be shown by the Clerk of the Course or on the instruction of the Clerk of the Course by the starter together with a board signaling the number of the competitor concerned.
- c) The flag indicates to the competitor that he is being warned for a contravention of the regulations, or indicates that a competitor is engaging in deliberate obstructive tactics.
- d) The competitor shall continue under observation for the rest of the race and shall report to the Clerk of the Course immediately after the race.
- e) The flag shall only be utilised by the Clerk of the Course after he has considered all other options available to him. It is recommended that clerks of course utilise the various other regulations at his disposal before deploying the above flag.

#### VIII. BLACK FLAG WITH ORANGE DOT

- a) The flag is black and has an orange dot, with a diameter of at least 40-cm, on it.
- b) The flag shall only be shown from the start finish line. The flag shall be shown by the Clerk of the Course or on the instruction of the Clerk of the Course by the starter together with a board signaling the number of the competitor concerned.
- c) The competitor concerned must stop on the infield immediately as the Clerk of the Course is of the opinion that the vehicle concerned has a potentially dangerous defect.
- d) The deployment of the flag shall not signal the imposition of a penalty by the Clerk of the Course and the competitor shall not be excluded from participation in any further or final rounds or heats of an event merely because of a defect on his vehicle. There is however a responsibility on the competitor to repair the defect to the satisfaction of the scrutineer and he may not race until the scrutineer is satisfied with the repairs. Similarly the competitor shall not be categorised as a competitor who was excluded from the event.

- e) The flag may also be used to remove rookies from the race when it is obvious that they are not coping and have become a danger to fellow competitors.
- f) Given the gravity of the reasons for the deployment of the flag Clerks of the Course should use the flag with circumspection as it can and should not be withdrawn once deployed.

#### IX. YELLOW FLAG

- a) The flag is used to invoke the safety flag status. It may be deployed by any of the circuit marshals in the first instance in the interests of safety. Given the gravity of the reasons for the deployment of the flag marshals should use the flag with circumspection as it cannot and should not be withdrawn once deployed. Marshals must realise that the use of the flag involves a process that may be detrimental to the leading competitor.
- b) The deployment of the flag in response to race regulations is the sole responsibility of the Clerk of the Course.
- c) Once deployed the flag shall be waved vigorously by all marshals until it is clear from the actions of all the competitors that they have seen and responded to the flags. Thereafter the flags shall be held stationary at the start line and at every post around the track.
- d) The alternative use of the flag is to regulate the warm-up lap procedure in which case it is deployed by the starter.
- e) This flag may be replaced by flashing or revolving amber lights. The lights should be set to become stationary once the procedure is fully invoked.

#### X. RED FLAG

- a) The flag is used to stop races and may be deployed by any of the circuit marshals in the first instance in the interests of safety. Given the gravity of the reasons for the deployment of the flag marshals should use the flag with circumspection as it can and should not be withdrawn once deployed. Marshals must realise that the use of the flag involves a process that may be detrimental to the leading competitor.
- b) The deployment of the flag in response to race regulations is the sole responsibility of the Clerk of the Course.
- c) Once deployed the flag shall be waved vigorously by all marshals until it is clear from the actions of all the competitors that they have seen and responded to the flags. Thereafter the flags shall be held stationary at the start line and at every post around the track
- d) The flag may be replaced by flashing or revolving red lights. The lights should be set to become stationary once the procedure is fully invoked.

### XI. BLUE FLAG

- a) The blue flag shall be light blue and shall have a distinctive cross over it.
- b) The flag is used by the Clerk of the Course or on the instruction of the Clerk of the Course by the starter to signal to a competitor that he is being lapped, or is holding up the race (see OT22.2)
- c) The said flag may be replaced by a light arrangement.

#### XII. WHITE FLAG WITH RED CROSS

a) The flag is used by marshals to indicate Medical emergencies.

#### XIII. YELLOW FLAG WITH RED ARROW

- a) This flag shall be yellow and the arrow shall be on both sides of the flag and shall as large and as visible as possible;
- b) The flag is used to instruct competitors to return to the pits. Once deployed by the Clerk of the Course (or by the starter on instruction of the Clerk of the Course) it shall also be deployed at the pit gate.
- xiv. The following SIGNAL BOARDS, complying with the sizes in OT11.1 above, are compulsory at all events:
  - a) **Back of grid signal** This board will have the words "BACK/AGTER" on it. This board is used by the Clerk of the Course to indicate to a competitor that he is to go to the back of the field.
  - b) Lap counting boards for at least the last 5 laps;
  - c) A board to indicate the **amount of laps** to be run;
  - d) A board instructing competitors to reform in original positions; and
  - e) A board instructing competitors to reform in single file.

## GRAPHIC ILLUSTRATION OF FLAGS AND THEIR MEANINGS:

FLAG DEPLOYED		DRIVER'S REQUIRED REACTION
Yellow flag held stationary when entering the track	HELD STILL	Be ready to do warm up laps / Form up into your single file grid
Green flag waved – beginning of race		Proceed with warm up laps
White flag		1 lap to go to start / restart / end of race
Yellow flag with red stripes		Exercise care something has changed on track
Yellow flag – waved all around track	WAVED	Stop racing – fall in behind the competitor who was ahead of you. Be ready to stop or go racing again
Red flag		Come to a stop at the start line as soon as it is safe to do so
Start flag	-	Race is on you may race
Black and white flag		You have been observed doing something illegal. Beware and report to race control
Black flag		Pull off the track – you have been disqualified
Yellow flag with red arrow	<b>→</b>	Return to the pits
Black flag with orange dot		Pull off – your car has a defect Pull off – you as rookie are a danger
Blue flag		You are holding up the race with defensive driving – race for position
Red cross on white		You are going to be passed – keep your line  Medical emergency exists please avoid the area

## OT7. ELIGIBILITY OF CARS / CHANGE OF COMPONENTS

- 7.1 Vehicles must comply with the construction regulations and applicable class regulations published in these regulations, including official amendments, additions or deletions, as well as the regulations and specifications applicable to the event. GCR 254 also refers.
- 7.2 Club status racing comprises the bulk of all oval racing and accordingly all race meetings shall comply with the sporting and technical regulations set out in this rule book as amended. Where organisers wish to deviate they shall be obliged to prepare a comprehensive set of club regulations and submit same to DO4SA for approval, which approval will not be withheld without good cause. The only deviations that would be permitted are specific further restrictions to these rules in respect of the National Championship classes and properly motivated new classes that the venue wishes to present. Here venues will need to satisfy the Commission in respect of the need for the proposed class.
- 7.3 DO4SA may require the organisers to perform such checks in regard to eligibility as it may stipulate.
- 7.4 Any new class at club level is to be authorised by DO4SA, upon proper written application, prior to the establishment of such a class.
- 7.5 A competitor may not enter more than one car for a particular class. He will only be allowed to race the car with which the car in which he drew onto the dummy grid for his first race.
- 7.6 A competitor may enter different vehicles for different classes at the same event.
- 7.7 A competitor may not enter the same vehicle in different classes at the same event. A 1660 cc and a 2100 cc vehicle may only move one class up to the next class.
- 7.8 A competitor may only compete in a class in which he had entered (in accordance with the entry provisions for the event concerned). Furthermore, he/she shall only be allowed to race in classes where he carried his/her entry through by signing on during documentation.
- 7.9 The following shall apply to the CHANGE OF COMPONENTS:
  - i) Any competitor who wishes to change any component that is subject to any limitation in terms of the class regulations shall notify the chief scrutineer of his intention to do so. The scrutineer shall be entitled to impound any part that is replaced. Scrutineers shall record all their observations in writing.
  - ii) Failure to comply with the above renders the competitor liable to exclusion.
  - iii) Any part so removed shall comply with the class regulations and any noncompliance shall render the competitor liable to exclusion as if the component were installed. Competitors shall declare all spare components that are subject to technical limitations at scrutiny.
  - iv) All competitors must be able to remove the engine and gearbox from the vehicle within 2 hours of being instructed to do so by the technical officials. Failure to do so will entail exclusion from the event.

#### OT8. DETERMINATION OF GRIDS - GENERAL

## 8.1 There are 4 means of determining grids being:

- i) Draws as set out in OT9.2 OT9.7;
- ii) Qualifying Heats / Laps;
- iii) Grading systems; and
- iv) Seeding or Handicapping.

## 8.2 The following shall apply to all methods of determining a grid:

- The method to be used shall be clearly set out in the regulations for the series or event;
- ii) A competitor shall not be entitled to a re-determination of the grid if, upon investigation it transpires that he had signed onto the incorrect sheet at documentation. In such a case he shall qualify last, start last or be placed at the back of the grading section he is allocated to in grids that are not determined by a draw or a partial draw.
- iii) Should a competitor be left off the grid due to an administrative error by the organisers or the officials of the day, the following shall apply:
  - a) The first determined grid or qualifying order shall stand;
  - b) All the tokens shall be returned and the aggrieved competitor shall draw;
  - c) He shall take up the place on the grid or qualifying behind the number he draws and all other competitors will move one position back.
  - d) He will remain in the sequence and shall invert as if was drawn in that position.

#### OT9. ENTRY TO COMPETE AT ANOTHER CLUB AND DETERMINATION OF GRIDS - DRAW

- 9.1 NECESSARY PROCEDURE TO BE FOLLOWED WHEN ENTERING AN EVENT AT ANOTHER RACE TRACK (OTHER THAN YOUR HOME-CLUB):
  - i) He/she must enter via his/her home-club secretary, who will furnish the hosting-club with his/her:
    - a) Full names;
    - b) Valid (for current season) MSA license number;
    - c) Class (to be competed in);
    - d) Home-club;
    - e) Car Prefix and Number.
- 9.2 The organisers shall provide the Clerk of the Course with suitable cards, discs, or balls (hereinafter referred to as "the discs") on which the competition numbers of each of the competitors have been noted. Such discs shall be identical and shall be free of any markings that could assist the draw of a specific competitor into a specific grid position.
- 9.3 The Clerk of the Course shall verify that all competitors who have entered and passed scrutiny have been allocated discs.
- 9.4 The discs shall then be shuffled. The order in which the discs are drawn shall be noted.
- 9.5 This document shall be posted on the notice board.
- 9.6 If there is only one race (no split) the list is the grid. If there is more than one race per heat (split) the first drawn competitor shall take pole position in the first race. The second drawn competitor shall take pole position in the second race. The balance of the positions on the grid(s) to be determined in like manner. If the regulations specify an inverted grid the procedure shall start from the bottom up, after deleting those who have withdrawn.
- 9.7 There may be grouping of competitors for the purposes of the draw at regional championship and national championship status events if it was specified to be so at the beginning of the series.
- 9.8 The system whereby discs, bearing the numbers 1 upward to the number of vehicles entered in the class, are shuffled and these discs are then drawn per competitor is also acceptable. In this instance the competitor takes up the grid slot corresponding to the number he draws or is drawn for him. Where heats are split and this method is used the competitor drawing number one will occupy pole in the first race. The competitor drawing two will occupy the pole position in race two and so on. The invert will be the same as above.

## OT10. DETERMINATION OF GRID - QUALIFYING HEATS / LAPS

- 10.1The Organisers shall prepare the track as per the condition of a race-day.
- 10.2 The number qualifying heats / grid-determination heats will be specified in the SR's for the event.
- 10.3The competitor who achieves the most points in the grid-determination heats will take pole position in the first heat of the main event, with the second heat being pole-invert and most points pole for the final of the event.
- 10.4Any deviation from this will be published, distributed to all clubs and noted to all competitors before the end of scrutineering. Should this not be possible, all competitors will sign in agreement before commencement of the first heat (usually at "Drivers Briefing").

#### OT11 CHANGING OF VEHICLES AND COMPETITORS

- 11.1 Once a competitor has competed in his first race he shall not be permitted to:
  - i) Use his second vehicle if the first vehicle is unable to complete the event for any reason;
  - ii) Swap the cars between the different classes he may have entered;
  - iii) Change the class in which he is competing.
  - iv) No change of driver of any kind will be permitted.

#### OT12 ASSEMBLY OF THE GRID

- 12.1The manner of determining the grid for an event shall be detailed in the SR's for the event. The method of determining the grid shall be the same for all events counting towards any series of events.
- 12.2 Unless specified in series or championship regulations the number of vehicles to compete in each heat shall be determined by the organisers, in consultation with the Clerk of the Course, taking into consideration the number of entrants and the reigning track and weather conditions.
- 12.3 Vehicles shall start two abreast.
- 12.4The grid for the first cycle of rounds or heats shall be posted on the notice board as soon as possible after being determined.
- 12.5The grids for the further rounds or heats shall be posted on the notice board as soon as possible after the completion of the first round. Without being prescriptive organisers and officials shall, within the constraints of the event itself afford competitors a reasonable time to establish that they are able to proceed with the next race.
- 12.6 Competitors who withdraw shall be removed from the ensuing grids and the places left open shall be filled by moving up the balance of the grid.
- 12.7A dummy grid shall preferably be formed in the pits in accordance with the grids determined above. If the dummy grid cannot be formed in the pits due to space constraints the vehicles should at least be put into a line-up / holding area. At very least a dedicated official shall confirm that the competitor is aware of his place on the grid in such cases.
- 12.8Competitors shall at all times be aware of the race format and be ready and available to take his place on the dummy grid or grid. Public address systems in the pits will aid this.
- 12.9 Competitors shall proceed onto the track, in single file in the positions that they occupy on the grid.
- 12.10 Competitors shall refrain from engaging in any form of sprinting, car testing, or the like until the Commencement of the warm-up laps, if applicable.
- 12.11 The final grid placing is only determined once the pit gate has closed for the race.
- 12.12 The places left open on the grid due to vehicles not coming out onto the track for the race will be filled. In all circumstances the positions left open shall be filled up. This is achieved by the single file start to the starting procedure.
- 12.13 Competitors shall obey the instructions of the Line-Up Marshal and observe the flags and lights being Aware that they are under starter's orders from the time they enter the track.
- 12.14 DO4SA may stipulate the maximum amount of vehicles that may participate in any one race on a specific track, in the interests of safety. This authority shall be exercised circumspectly upon advice of the stewards of the events held at such a track.

#### OT13 STARTING PROCEDURE

- 13.1 All races shall commence with a rolling start unless the SR's for the event dictate otherwise.
- 13.2 Warm up laps, although not compulsory, shall form part of this procedure, if allowed. Please continue at subrule 13.7 below for starts that do not require warm-up laps.
- 13.3 The warm up laps shall be conducted as below.
- 13.4 The Clerk of the Course will advise the competitors how many warm up laps are to be given throughout the event during drivers briefing if it is not stipulated in the SR's for the event.
- 13.5 While cars are being started (or are entering the track) the track shall be in safety flag status, the yellow flags being displayed at the start and at every marshal post around the track.
- 13.6 Once the starter or the Clerk of the Course is satisfied that the track is clear the starter shall start the warm up laps by waving the green flag.
- 13.7 Once the predetermined amount of warm-up laps has been run the starter will deploy the yellow flags. The track shall return to safety flag status. The competitors shall fall into single file in order of their grid positions. This facilitates confirmation of the correctness of the grid by start line officials. The responsibility of returning to a grid position once it has been vacated rests with the competitor. Positions left open by competitors that did not come out of the pits or had withdrawn from the race before that point in time shall be filled. This is made easier by the single file order. The first competitor takes up pole, the second goes to position 2 and so

- on. Please note that classes that do not require warm up laps continue their start position from this point forward.
- 13.8 The Starter shall then indicate to competitors that they must take up their allocated grid positions alongside one another by crossing and uncrossing his arm across his chest. Any competitor that is not able to slot into his correct position shall signal this to the officials. The Clerk of the Course may take action against a competitor who slotted into the incorrect position by placing him at the back of the grid. In the interests of the spectators and the time management of the event the Clerk of the Course may instruct the start, notwithstanding that the competitors are not in their correct position. By this action he reserves the right to act against the competitors that caused the delay.
- 13.9 Once the starter or the Clerk of the Course is satisfied that start formation is correct he shall indicate that the race will start on the next lap by raising the white flag at the start. The competitors must be ready to start the next time they approach the start line.
- 13.10 The competitor in pole position shall regulate the pace of the formation lap of the race.
- 13.11 A competitor who stalls or suffers another mechanical breakdown during the formation lap shall make a concerted effort to pull out of the formation and off the track as the case may be. The circuit marshals shall be on the lookout for such stalled competitors and shall immediately signal such an occurrence by waving both the red and the yellow flags simultaneously in circular motions, if the competitor is not able to pull off the track to a place of reasonable safety.
- 13.12 The principle objective is to start races if stalled competitors are able to pull off the track without disadvantaging other competitors. If that was not possible and the yellow and red flags were used the aborted start procedure shall apply.
- 13.13 Vehicles that are not able to start, having pulled off the track, shall be entitled to join that specific race at any stage but can only do so from the infield directly across from the starters position. He would do so by moving to that position and being waved away by a marshal.
- 13.14 The pole position competitor shall slow prior to entering the corner before the start in order to ensure that the field is well bunched and in formation as the start line is approached. The pole position competitor shall proceed towards the starting line at the same speed at which he entered the corner prior to the start. It follows therefore that the pace at which the competitors approach the start must be above idling speed yet substantially below race pace.
- 13.15 A competitor that passes another competitor or leaves his position prior to the start of the race shall be adjudged to have jump-started and shall be penalised, unless the Clerk of the Course is of the opinion that the person ahead or abreast of him reduced speed (other than in terms of the above sub-rule) before the start of the race. A competitor who neglects to slow down on the approach to the final corner or accelerates prior to the start of the race shall be penalised by the Clerk of the Course. Competitor A that do not stay in his grid slot or fails to bunch up as required prior to entering the corner before the start and opens a grid slot in front of him, may be passed by the competitor B behind him to fill the open grid slot and competitor A may not try and pass competitor B. If competitor A try to pass, he shall be adjudged to have jump-started.
- 13.16 A competitor who fails to take up his correct grid slot or fails to bunch up as required shall be penalised by the Clerk of the Course.
- 13.17 The starter shall, thereafter start the race by lowering the start flag or illuminating the green light. Acceleration may only take place from that moment on, irrespective of whether or not the lead car has crossed the start finish line. The starter shall start the race at any point from the apex of the corner up to the start finish line. He shall at all times face the racetrack. The starter shall remain in a fixed place throughout the event and shall start the race before the lead car passes his position. The starter shall report jumped starts to the Clerk of the Course immediately.
- 13.18 The Clerk of the Course shall at all times be in close proximity to the starter in order ensuring the effective enforcement of the starting procedures.
- 13.19 No official may refrain from starting the race once the white flag has been shown in the starting procedure. If there is a problem the yellow flags should be waved immediately. Please see aborted starts below.
- 13.20 Vehicles that need to be pushed to the infield, having stalled on the formation lap or dummy grid, shall only be pushed by officials or vehicles authorised to do so.
- 13.21 Also reed SSR 4.3 in the GCR'S handbook.( Restarting a race stopped prematurely)

#### OT14. ABORTED STARTS

- 14.1The Clerk of the Course shall be entitled to abort the start of a race if:
  - i) A competitor's vehicle stalls on the formation lap and he is not able to pull off the track without disadvantaging another competitor;
  - ii) A competitor is adjudged to have jump started;
  - iii) The field is no longer bunched or in formation as they approach the start line;
  - iv) The pole position competitor failed to slow on the approach to the corner prior to the start; or
  - v) A competitor accelerated prior to the start of the race.
- 14.2The Clerk of the Course shall immediately invoke the safety flag procedure. While the race is in this state he shall take appropriate action against an offending competitor and then initiate a complete new start, which shall commence with the signal to competitors to take their grid positions or the white flag as the case may be.
- 14.3 In cases where the aborted start was caused by a competitor who stalled or had a breakdown the competitor will be afforded an opportunity to restart their vehicles. They shall however be placed at the back of the grid. If more than one competitor stalled they, the stalled competitors, shall start in single file in the same order in which they occupied the original grid.
- 14.4The Clerk of the Course shall exercise strict control in such circumstances and may order that the competitor who caused the aborted start be deemed a non-starter if the competitor is not able to restart his vehicle immediately. The Clerk of the Course shall not allow the stalled competitors more than one minute to elapse prior to the commencement of the new start. Vehicles that are not able to start shall be pushed off the track by the marshals. The competitor concerned shall not be entitled to join the race at any stage, even if the start is again aborted.
- 14.5 The competitor shall not receive any outside assistance, other than push starting.
- 14.6The grid slot left open by a stalled competitor, a competitor who withdrew on the formation lap or a competitor who has had disciplinary action taken against him for any reason shall be left open unless single-file is invoked. Take note that this is only applicable for Aborted Starts. Refer to OT13 for other circumstances.
- 14.7 No re-fueling shall be permitted.
- 14.8 Vehicles that need to be pushed to the infield for whatever reason shall only be pushed by officials or vehicles authorised to do so.
- 14.9 Clerks of the Course should not abort starts if competitor(s) have gained an advantage without prejudicing another competitor's actual start. It would be more appropriate to penalise the offending competitor after the event. This is particularly the case where the first two competitors jump the start.

#### OT15. PUSH-STARTING PROCEDURES - CLUTCH LESS VEHICLES ONLY

- 15.1The competitor must be seated at the wheel of his vehicle throughout the push start operation.
- 15.2Due care shall be taken while pushing assistance is being given and all instructions given by officials shall be obeyed immediately.
- 15.3 Vehicles that need to be pushed to the infield, having stalled on the formation lap or dummy grid, shall only be pushed by officials or vehicles authorised to do so.
- 15.4 All competitors shall be obliged to arrange their own push vehicles, unless the SR's indicate that the organiser will provide these.
- 15.5 Push vehicles shall leave the track to the infield or to the pits as soon as possible. Push vehicles that remain on the infield shall ensure that they do not present a danger to competitors nor obstruct the view of the officials. One such vehicle shall however remain on the infield at all times.
- 15.6 A vehicle that is not able to start within a lap of the circuit shall be deemed a nonstarter.
- 15.7 Push start vehicles shall be manned throughout the race and should be ready to take to the track upon the instruction of the race officials to assist with any restart that may be ordered.

- 15.8 Vehicles may be pulled onto the track with straps or ropes but may not be started in this manner.
- 15.9 Competitors that have spun out by themselves or due to the actions of others shall be restarted by the appointed push cars. If they are not ready to start when the push car arrives or do not start when pushed they shall be pushed to the infield.
- 15.10 Should the same vehicle spin for a third time in a race it will not be restarted but will be pushed to the infield.
- 15.11 Where a competitor has spun his own vehicle he shall be placed at the back of the grid. Should more than one competitor spin of own accord they will still be placed at the back of the pack but will be placed in the order they were before they spun.
- 15.12 Where a competitor is spun by another competitor the innocent competitor shall be restarted and put back in his position. The culprit shall, pending the further actions of the Clerk of the Course, be put at the back of the grid.
- 15.13 Push-starting under Full-Course Yellow flags or on restarts is not regarded as outside assistance.
- 15.14 These regulations apply equally to the micro-midget class where the competitor's crew would be responsible for push starting.
- 15.15 For clarity it is recorded that this regulation applies to sprint cars, micro-midgets and midgets as national classes as well as to other club classes that permit clutch less vehicles.

#### OT16. WET RACES

The Clerk of the Course and the Stewards shall determine the procedure to apply.

## OT17. RACING UNDER THE YELLOW FLAG (SAFETY STATUS RACING)

- 17.1 This procedure is only used in accordance with regulations dealing with aborted starts and if a vehicle has been involved in an incident and has come to rest in a position where it presents a danger to other competitors.
- 17.2 This rule shall not be implemented if a car has spun off and poses no threat for another.
- 17.3 This rule shall not be used as a means to communicate a penalty to a competitor other than in the case of an aborted start.
- 17.4 In applying this rule, the Circuit Officials shall be mindful of the disadvantage it has for competitors who have built up substantial leads over their closest rivals in the race.
- 17.5 Once the yellow flags are deployed the competitors shall cease racing and shall line up in single file and continue circulating at a sedate pace, marginally above idling speed, holding the exact positions they had when the procedure was invoked, without overtaking each other while awaiting the restart or a stoppage. Where a competitor passes another competitor in the process of ceasing racing he shall forthwith defer to that competitor. A competitor that passes another competitor under the yellow flags will be dealt with as follows after the race in terms of the penalty provisions in OT36.
- 17.6 Competitors that have been lapped shall remain in their positions in the field. The object of this rule is to preserve the exact order the vehicles had on the track until a restart is possible. Competitors who are about to lap back markers shall not use this opportunity to gain an advantage by lapping the competitor and shuffling the field to have the field in the order in which they would be placed had the race been finished. By way of example if the first and second placed competitors have lapped the last placed competitor, the last placed competitor shall remain in third place on the track. In this way the rest of the competitors have the same challenges in respect of passing slower traffic.
- 17.7 Competitors and officials alike are reminded that there is no requirement for race officials to put the competitors in order under yellow flags. The responsibility of maintaining or regaining the position that was held rest with the competitor. Race officials shall only intervene by instructing competitors to go to the back of the grid, return to their position or pull of the track if the car does not want to start.

- 17.8 The safety flag shall be held out as long as is deemed necessary by the Clerk of the Course, who shall however have regard to the temperatures as well as the fuel situations of the vehicles in the field. Once the Clerk of the Course is satisfied that the track is clear he shall instruct the starter who shall raise the white flag. This shall indicate to competitors that the race will continue with race at the start of the next lap when the green flag will be shown.
- 17.9 The operation of the green flag shall be the same as for the start procedure.
- 17.10 Should the marshals be unable to remove the obstacle from the track the Clerk of the Course shall stop the race.
- 17.11 The laps completed in terms hereof shall not count towards the total number of laps that should have been run.
- 17.12 Officials are reminded that the prolonged / frequent use of the yellow flag could destroy a good race and is harmful to the spectators' level of enjoyment and leads to heat build-up in engines and cooling down in tyres. Hence it is preferable to stop a race if the removal of an obstruction is not complete within 5 laps or two minutes.
- 17.13 The Clerk of the Course shall take action against competitors who caused the deployment of the safety flag. As a general principle the competitors should be placed at the back of the pack.
- 17.14 Clutchless vehicles (midgets, micro midgets and sprint cars) may be push started. As the vehicles in all other classes should be able to start with starter motors the option of a push start should be offered to the competitor whose vehicle will not start upon penalty of racing from the back of the grid. Please refer to OT 20. This regulation shall not apply when a competitor has been spun off within the rules in contact racing. This regulation does not change the basis for initiating the yellow flag as set out elsewhere in this rule. Clerks of the Course shall not initiate the yellow flag to assist a stalled competitor unless the vehicle presents a danger. In any event proper application of the regulations would see the stalled competitor being placed at the back of the grid as being the cause of the stoppage.

#### OT18. STOPPING OF RACES.

- 18.1A race shall only be stopped in the interests of safety or if the circuit officials are of the opinion that the track would not be able to be cleared of vehicles (that pose a danger) in the time allowed for full course yellow flags.
- 18.2Officials shall do so only after considering all other options available to them. The decision to stop a race shall not be taken lightly.
- 18.3The Clerk of the Course shall also stop a race if the driving regulations compel him to do so. The Clerk of the Course has the sole right to stop a race in this case.
- 18.4The Clerk of the Course shall take disciplinary action against the competitor responsible for the incident that caused the stoppage. As an absolute minimum such a competitor shall be placed at the back of the pack.
- 18.5 Competitors shall cease racing and come to a stop at the finish line when it is safe to do so and as soon as possible.

## OT19. GENERAL RACE REGULATIONS

- 19.1Any vehicle which appears dangerous (in the opinion of the Clerk of the Course, the chief scrutineer or technical consultant) or which is being driven dangerously, notwithstanding that it has been passed by the scrutineers, may be halted by the Clerk of the Course, whether during practice or during a race.
- 19.2If any vehicle, having passed scrutineering, is dismantled or modified in a manner which may affect its suitability or safety, or it is involved in any incident likely to have a similar effect it shall be submitted for scrutiny again.

- 19.3 Only an officially licensed competitor shall drive a racing vehicle on the circuit during practice and racing. Under no circumstances may passengers be transported in a race vehicle during practice, qualifying or in races, unless the specific vehicle has been inspected and approved by the National DO4SA Technical Inspector, which needs to be in writing.
- 19.4All vehicles, except emergency vehicles, shall be pushed or driven in the direction used by the class on the circuit at the time. Between races great care should be taken.
- 19.5 All "doughnuts" and "wheelies" are to be performed under the direct supervision of the Clerk of the Course with his permission having first been obtained.
- 19.6 Any parade shall be under the control of the Clerk of the Course. Full racing kit is to be worn by competitors. All parades to be at a sedate pace with a pace car setting the pace.

#### OT20. DRIVING REGULATIONS

- 20.1A competitor shall, at all times, drive in a manner compatible with general safety. The competitor may be halted or penalised by the Clerk of the Course for failure to do so.
- 20.2A competitor who is found to be responsible for an accident/incident outside the scope of the applicable driving regulation shall have disciplinary action taken against him by the Clerk of the Course.
- 20.3 Competitors are expected to assist in the orderly conduct of races that need to be restarted after being stopped (red flag) or run under caution (yellow flag) by keeping their position behind the driver ahead of them, bearing in mind that lapped competitors must remain in their position on the track and not in their, the lapped competitors', race classification
- 20.4Maneuvers liable to hinder other competitors such as premature direction changes, obvious obstruction, deliberate crowding to the inside or outside of the track, dangerous lane changes, premature braking, braking on exits of corners or any other abnormal actions a strictly prohibited. Maneuvers that have the clear intention being unsporting shall be penalised.
- 20.5 No competitor may change "lanes" more than once down the straight.
- 20.6 When a competitor leaves the track while competing he shall immediately bring his vehicle under control and rejoin the race near the place where he left the race when it is safe to do so.
- 20.7No advantage must be gained over the other competitors, nor may he disadvantage any other competitor upon rejoining.
- 20.8 The track alone shall be used by the competitors during the race.
- 20.9 Competitors who have completed the race shall leave the track, together with those who may have been halted by the Clerk of the Course, in an orderly fashion and proceed to the pits immediately. Those whose vehicles require the assistance of tow vehicles shall await the required vehicle and leave track as soon as possible. A competitor shall not be allowed to interfere with the operation of the breakdown crews, except that they may give advice concerning the most effective means of towing the vehicle. Vehicles may remain on the infield for one race if the breakdown crews cannot remove all the stranded vehicles at once.
- 20.10 Where a competitor is unable to complete a race due to race damage caused by another competitor, the competitor who caused the damage shall be penalised. The competitor who caused the incident shall be placed at the back of the grid when the race is restarted irrespective of whether the incident was deliberate or accidental. The aggrieved competitor shall be deemed to have completed the heat in the position he/she held at the time of the infringement. This is strictly only applicable in circumstances where the aggrieved competitor was absolutely without fault at the time of contact in the exclusive opinion of the Race Controllers.
- 20.11 A competitor who needs to draw a problem he may have to the attention of the race officials shall do so prior to coming under starter's order that is before the white flag is raised. Competitors shall not avail

themselves of this remedy if they could have addressed the problem in the pits. A competitor may, by way of example, not solve a mistake by the lap scorers at this point. That should have been done in the pits. He may address a situation where a race official has placed him in slot 4 instead of his allocated slot number 3. In cases where vehicles have done warm up laps and are expected to form up themselves the competitor should fall out of the line and circulate at the back of the grid and come to a stop off the race line on the inside of the circuit.

- 20.12 No competitor may bring his vehicle to a stop on the circuit to have race officials address any grievance he may have irrespective of the situation once the signal to form the grid or the white flag has been given. This type of action is dangerous. Competitors should avail themselves of the protest regime set out in the regulations.
- 20.13 In various places in the driving related regulations reference is made to the inside or outside as it relates to vehicles. Over and above the plain meaning of the words relating to whether or not something is inside or outside something the words, depending on the context, relate to a specific side of the vehicle. The term outside relates to the left side of the vehicle that is raced in a clockwise direction.

## OT21 DRIVING STYLES

- 21.1Contact racing is prohibited for all open wheeled vehicles and is also prohibited on dirt circuits with the only exception on dirt being the "Banger" classes.
- 21.2 "Non-Contact" shall mean nothing more than the coming together of vehicles caused by close racing. Such coming together shall not be forceful enough to cause the leading vehicle to be placed in a different racing line involuntarily.
- 21.3 "Contact" shall mean any deliberate or accidental collision with a leading vehicle. "Shunting" shall mean the force required to move a leading competitor off his chosen racing line but shall not be forceful enough to cause him to lose control of his vehicle, spin out, or come into contact with the safety wall or barriers.
- 21.4 "Bumping" shall be the deliberate collision with a leading vehicle with the aim of upsetting the leading vehicle's approach to the corner or the exit thereof.
- 21.5 "Spinning off" or "spinning out" shall mean the removal of the leading competitor from the track, to the inside, by applying sustained and deliberate pressure to the inner rear area of his vehicle. It should be noted that spinning off is a quick almost instantaneous action that allows the competitor executing the spin to proceed in the race without losing his place. When the attempt at spinning is not immediately successful the competitor attempting the spin shall back off;
- 21.6 "Passing maneuver" shall mean the coming together of vehicles caused by one competitor passing or attempting to pass another competitor. A "passing maneuver" shall not include "contact," "bumping," "shunting" or "spinning off."
- 21.7 "Accident " shall mean a racing incident / collision between one or more vehicles and or any structure on the track; and
- 21.8 "Incident" shall mean spinning out due to loss of control, oil spillage, breakages or technical failures such as a light malfunction or incorrect use of flags by officials.
- 21.9 The following applies to all styles of racing:
  - i. DURING THE FIRST LAP:
    - a) The non-contact rules will apply;
  - b) Passing manoeuvres are permitted;
  - c) An accident / incident that causes a disadvantage to other competitors, will automatically cause the race to be restarted;
  - d) If a competitor is spun out by another competitor the race will be restarted;
  - e) A competitor deemed to be responsible for such an accident or incident will be sent to the back of the grid by the Clerk of the Course;
  - f) Should a competitor that competes in a class that does not require an operational clutch spin out and remain on the circuit or partially on the circuit the safety flag procedure shall be invoked. The offending competitor shall be placed at the back of the grid. OT14, OT15 above apply; and

g) These first lap regulations shall apply until all the competing competitors have completed the first lap or until those who have not yet completed the first lap have been passed by the leaders, thus lapping them. After the first lap all racing shall proceed in accordance with the general regulations in OT20 above as read with the regulations applicable to overtaking and lapping set out in OT22. Further racing shall be strictly in accordance with one of the driving styles mentioned above and set out in detail below.

#### 21.10 The following applies to NON-CONTACT racing: -

- i) Only non contact and passing manoeuvres are permitted;
- ii) A competitor may not maintain contact with or push a vehicle in front of his own during a race.
- iii) The Clerk of the Course shall exclude competitors who deliberately spin other competitors.

## OT22. OVERTAKING AND LAPPING

#### 22.1 The following shall apply to overtaking: -

- i) The leading competitor may not change direction more than once down the straights.
- The corners as well as the approach and exit zones thereof may be negotiated by the competitor in any way they wish, within the limits of the track and the constraints imposed by these regulations;
- iii) Overtaking, according to the possibilities of the moment, may done on the inside or outside;
- iv) When a competitor has been passed in a corner, he will not interfere with the competitor who has passed him down the first straight they encounter. "Interfering" can be interpreted as cutting into his/her race-line.
- v) When a competitor has been passed down a straight, he will not interfere with the competitor who has passed him going into the first corner they encounter. "Interfering" can be interpreted as cutting into his/her race-line.
- vi) If the passing competitor is on the outside the competitor being passed must adjust his race line when he exits the corner so that the passing competitor has sufficient space on the clear race line to pass down the next straight; and
- vii) If the passing competitor is on the inside when approaching the corner, the competitor being passed shall leave sufficient room on the inside for the passing competitor. He may not turn in on the passing competitor.

## 22.2 The following shall apply to races being held up unnecessarily: -

- The competitor who is holding up the race unnecessarily shall receive the blue flag;
- ii) Such competitor shall race his usual race line and refrain from defensive tactics;
- iii) If the competitor's actions still hold up the competitor intent on passing the Clerk of the Course shall take action against the leading competitor.

#### 22.3 The following regulations shall apply to the lapping of another competitor: -

- i) Generally:
  - a) If a competitor is about to be lapped, he shall receive the blue flag to indicate that he is about to be lapped;
  - b) Any competitor, who does not take notice of the blue flag, maybe penalised by the Clerk of the Course. Systematic or repeated offences may result in exclusion from the race.
  - c) The competitor who is a lap behind the leader shall not interfere with or race against the leading competitors.
  - d) The competitor being lapped shall not interfere with or obstruct the faster competitor at all.
- ii) The competitor who is to be lapped shall keep to a specific racing line that would afford the passing competitor an opportunity of passing. The following principles apply:
  - a) If the passing competitor is on the outside the competitor being passed must adjust his race line when he exits the corner so that the passing competitor has sufficient space on the clear race line to pass down the next straight.

b) If the passing competitor is on the inside when approaching the corner, the competitor being passed shall leave sufficient room on the inside and shall exercise care so that he does not himself spin off and hinder the passing competitor.

#### OT23. REPAIRS AND MAINTENANCE

- 23.1There shall be no repair time whatsoever.
- 23.2 Marshals are, as part of their cleaning up duties, authorised to remove loose and flapping body panels, irrespective of the laps run or remaining. No one is allowed to bend pipes and the like during a race. This is considered repairs and is not permitted.
- 23.3 The decision of the Clerk of the Course in instances such as these is final.

#### OT24. STOPPING OF A VEHICLE DURING THE RACE

- 24.1This regulation does **not** apply to the situation where a competitor spins out, is spun out, or loses control and brings his vehicle to a standstill momentarily to regain control.
- 24.2A competitor wishing to leave the race shall signal his intentions in good time and is responsible for ensuring that the maneuver is carried out safely and as near as possible to the point of exit to the infield.
- 24.3Apart from the competitor himself and in exceptional cases, the competent officials, nobody is allowed to touch a stationary vehicle under penalty of exclusion from the race. A competitor shall not push his vehicle along the track or push it across the finishing line, irrespective of his opinion about the safety of such step.
- 24.4Any competitor stopping on the circuit or its verges, whether voluntarily or involuntarily (such as through stalling) shall remain there until it is safe to move as directed by an official. Competitors may not remove their crash helmets and/or their safety belts unless instructed to do so by the Clerk of the Course or Flag Marshall.
- 24.5 Vehicles that have spun off or have stopped on the edge of the track must be removed to the inside of the circuit if they are not able to continue racing in the particular race immediately.
- 24.6Any competitor who stops his vehicle of own accord shall be deemed to have withdrawn from the race and shall not be permitted to rejoin the race at any stage or score points, irrespective of the number of laps to be run.
- 24.7 Once a competitor gets out of his vehicles he is considered a having withdrawn from the race.
- 24.8 Any competitor who has stopped his vehicle (as set out in this rule) shall not rejoin the race at any stage and shall not score points.
- 24.9 No repairs may be carried out on the infield or the track.
- 24.10 The replenishment of vehicles on the track or infield is prohibited as the competitor has withdrawn and cannot benefit from any subsequent stoppage.

#### OT25. WITHDRAWAL AND RETIREMENT FROM A RACE

- 25.1Competitors who are unable to participate in a race or event must inform the Paddock Marshall as soon as possible, stating their reason for withdrawal (refer GCR 110 ii). They may be required to sign a form declaring such withdrawal / retirement.
- 25.2Once a competitor/ vehicle has/has been retired or withdrawn from a particular race, he/it may not rejoin that particular race.
- 25.3Any vehicle involved in a collision or accident, during either racing or practice, may be halted by the Clerk of the Course, chief Scrutineer or Technical Consultant for examination by the Scrutineers. If the vehicle is not in a fit condition to continue, it shall either:
  - i) Be repaired to the satisfaction of the Chief Scrutineer or his appointed deputy;

- ii) Be impounded until the time for protests, regarding driving conduct in the race concerned, has elapsed; or.
- iii) Removed from the course.
- 25.4A vehicle that was involved in an accident, that caused death or bodily injury, may not be removed without the written authority of the Clerk of the Course. The stewards of the meeting may impound the vehicle.
- 25.5 A competitor who withdrew from every race in the heats shall not be permitted to start the final race.

#### OT26. RESTARTING OF RACES THAT WERE STOPPED

- 26.1 If the first lap of the race has not been completed:
  - i) The original start shall be invalid and the race shall be restarted in the original starting positions, unless the Clerk of the Course has taken action against a competitor;
  - ii) The race shall be considered a new race and the full amount of laps shall be run.
  - iii) Competitors who stalled between coming onto the track for the race and the first start shall be entitled to join the race provided they remained seated in their vehicles and managed to start the vehicle without assistance. Vehicles that do not require clutches shall obviously be allowed a push start.
  - iv) A race shall only be restarted as a new race once. If a further incident takes place in the first lap of the restarted race the race shall be stopped but shall restart from the second lap with the vehicles in single file see OT26.2 below.
- 26.2 If one or more laps had been completed by the leader:
  - i) The race shall restart with the competitors in single file see OT26.7 below.
  - ii) Only the competitors whose vehicles crossed the finish line on the previous lap and were able to reach the holding point at the start line shall be permitted to restart the race. However, competitors who could not reach the holding point due to the deliberate or accidental actions of another competitor during an incident that lead to the stoppage shall be permitted to restart, subject to the Clerk of the Course's obligation to take action against the competitor who caused the incident.
  - iii) The number of laps in the second part of the race shall be the number required to complete the original number of laps. The lap on which the incident occurred shall fall away the race being shortened by the lap on which the incident occurred.
- 26.3The complete starting procedure as set out elsewhere in these regulations shall apply to all restarts, except that the green flag shall be used to restart the race in situations where one or more laps had been completed. Where the race is stopped in the first lap the start flag shall be used, as it is a completely new race. The second or further formation lap shall not be included in the number of laps to be run.
- 26.4No refueling, adjustments or replenishments will be allowed. Competitors are therefore urged to ensure that they commence races with sufficient fuel, oil, and water.
- 26.5 If a specific race has to be restarted more than twice due to a deliberate infringement by the same competitor(s), as deemed by the Clerk of the Course, the said competitor(s) shall be excluded from further participation in that particular heat. Restart positions will be taken as per the relevant positions of competitors concerned, prior to the incident, with the guilty party having been excluded.
- 26.6The Clerk of the Course may not declare the race complete. It must be restarted even if there is only 1 lap to run.
- 26.7 Once a race is stopped the scorers shall revert to the positions of the competitors as they were on the track at the end of the lap before the incident. The competitor who caused the stoppage shall forfeit his position on the track and shall be deemed to be the last on track. If more than one competitor caused the

stoppage they shall be placed behind the last competitor who was not involved in the incident, in order of their respective positions. Vehicles that have been lapped shall remain in their positions in the field. The object of this rule is to preserve the exact order the vehicles had on the track. Competitors who were about to lap back markers shall not use this opportunity to gain an advantage by lapping the competitor and shuffling the field to have the field in the order in which they would have been placed had the race been finished. By way of example – if the first and second placed competitors have lapped the last placed competitor, the last placed competitor shall remain in third place on the track.

- 26.8The lap scorers shall determine the positions as soon as circumstances permit and furnish them to the starter without delay.
- 26.9 Clutch-less vehicles (midgets, micro-midgets and sprint cars) may be push-started. As the vehicles in all other classes should be able to start with starter motors, the option of a push start should be offered to the competitor whose vehicle will not start upon penalty of racing from the back of the grid. Please refer to OT15. This regulation does not change the basis for initiating the red flag as set out elsewhere in these rules. Clerks of the Course shall not initiate the red flag to assist a stalled competitor.

#### OT 27 DETERMINATION OF THE FINISH OF AN EVENT

### GCR 272 applies.

#### OT28. NUMBER OF LAPS AND THE NUMBER OF COMPETITORS IN RACES.

- 28.1The SR's for each event shall deal with this issue. The SR's for an event may not override series or championship regulations.
- 28.2 Recommended starters in the final: 15
- 28.3A guideline for the maximum number laps in any heat is two more than the number of vehicles that started the race.
- 28.4 The following is a guideline for the maximum number laps in any final:
  - i) If less than the recommended number of competitors start:
    - a) At least two more than the number of vehicles that started the race.
  - ii) If the recommended number or more competitors start: -20 laps
- 28.5It is recommended that scoring systems should afford at least 75% of the field that starts any race an opportunity of scoring reasonable points if they finish a race. It is further recommended that there should be a point differential between first and second places. Thereafter points should be on a sliding scale and all finishers should receive at least one point. 24,20,18,16,15,14,13,12,11,10,9,8,7,6,5,4,3,2,1
- 28.6 Splitting of a class, 20 cars

## OT29. SCORING

- 29.1 Lap scorers shall ensure that they record each race in such a manner that they can at any time provide other race officials with information such as the precise order vehicles occupied on the circuit as well as their classification in the race concerned. Lapped traffic shall be suitably marked.
- 29.2 Where a point penalty is incurred the penalty points shall be deducted after the heat in which the incident occurred.
- 29.3 The following abbreviations shall be inserted on the result sheets:
  - i) DNS: to denote that a competitor did not start a race. In order to be classified a starter the competitor has to receive the start flag. In other words if a competitor withdraws at any stage prior to the start flag he will be scored as a DNS

- ii) DNF: to denote that a competitor did not finish a race due to a breakdown or as a result of his own decision to withdraw from the race;
- iii) WD: to denote that a competitor withdrew from a specific race;
- iv) WE: to denote that the competitor withdrew from the event at the event;
- v) DNA: to denote that a competitor who had entered for an event did not arrive for the event;
- vi) OD: to denote that a competitor was halted by the Clerk of the Course due to a perceived dangerous defect on his vehicle;
- vii) RD: to denote that a competitor did not complete a race due to race damage sustained;
- viii) EXR: to denote that a competitor was excluded from the race;
- ix) EXE: to denote that a competitor was excluded from the event; and
- x) PP (n) x: to denote that the competitor received a points penalty. The "n" denotes the race in which the penalty was incurred and "x" denotes the amount of points to be deducted. This annotation shall be made in the margins alongside the competitor's name.

## OT30. CLASSIFICATION OF A FINISHER

- 30.1For a competitor to be classified as a finisher, he/she must cross the finish line on the racing surface with his vehicle running under its own power and receive the checkered flag. No outside assistance is allowed. If a competitor loses control of his vehicle and crosses the finish line on the infield or outfield and is able to regain control of his vehicle before the end of the straightway he shall forfeit 2 positions in the classification. If he does not regain control and does not return to the track before the end of the straight, he shall be placed last. A competitor who is spun or bumped off the track on the last lap, in contravention of the rules, shall be reinstated where he was prior to the spin or bump, provided the culprit is penalised as well. If another competitor has passed the feuding competitors while they are involved with the spin or bump, the passing competitor shall not be prejudiced by the reinstatement. In practical terms it may mean that two competitors are scored with the same position.
- 30.2The provisions of GCR 274 shall only apply if the point at which a race is determined as being complete is altered by the race officials, after having afforded competitors a hearing or receiving a protest as the case may be. The provisions are however modified as follows:
  - i) If 75% of the scheduled laps have been completed in races scheduled to last for 20 laps or less;
  - ii) If 80% of the scheduled laps have been completed in races scheduled to last for between 21 35 laps; or
  - iii) If 90% of the scheduled laps have been completed in races scheduled to last for 36 laps or more.
- 30.3 Competitors will be classified according to:
  - i) Firstly the number of laps that they completed and;
  - ii) Secondly the order in which they passed the start / finish line for the last time.
- 30.4When applying the above rule race officials shall have regard to the prejudice that others could suffer as a result of altering the point at which the race is deemed complete. They are empowered to award an aggrieved competitor the points achieved by the culprit only if the actions of the culprit warrant an exclusion from the race or event.

## OT31. DEAD HEATS AND TIES

31.1Competitors, who are adjudged to have dead-heated for a place in a particular race, shall be awarded an equal share of the cumulative total of the points they would have scored had they finished one ahead of the other. The competitor finishing behind those who have dead heated shall be awarded the points for the position he would have achieved had the preceding competitors finished one ahead of the other.

- 31.2In the case of a dead heat for the first place in respect of the final race of an event, the prizes for the first and second place will be divided equally between the two competitors. Dead heats for other positions will be dealt with similarly. **This only applies if the prizes are determined by the race placing and not points scored**. The award will be shared.
- 31.3A tie in respect of "qualifying" (heats prior to the final heat) will be broken by reference to the second and then third best heat results
- 31.4 If the tie still persists preference will be given to the competitor who posted the result first.
- 31.5 36.4.A tie for points occurring prior to a final for an event will be broken by taking into account the competitors' highest placing obtained during the heats of the event.
- 31.6If this does not resolve the tie reference shall be made to "qualifying", if applicable. If this does not resolve the tie the competitor who first obtained the highest placing shall take preference.
- 31.7 If this does not resolve the tie the competitors shall draw.
- 31.8A tie for points occurring after a final of an event will be broken by taking into account the highest placing obtained in the final of the event.

## OT32. POST-EVENT PROCEDURE

- 32.1 The Clerk of the Course or Technical consultant is specifically empowered to order that any vehicle that, in his opinion, does not conform to fuel or other specifications is placed in Parc Ferme and subjected to post event scrutiny.
- 32.2 He may require that the vehicle be stripped with the cost being borne by the competitor. Re-assembly to be done by the competitor. The provisions of GCR 254 shall apply.
- 32.3 The results of the event shall be posted upon the notice board, or such other place as described in the SR's, for a period of thirty minutes:
  - i. Within thirty minutes of the completion of the last race of the event; or
  - ii. The time stipulated for the commencement of the prize giving function, whichever is the later.

## OT33. COMPLIANCE WITH ENGINE, FUEL AND WEIGHT SPECIFICATIONS

- 33.1The provisions of GCR 254 shall apply.
- 33.2The competitor and a maximum of two of his pit mechanics shall, under the direction and scrutiny of the technical team and the scrutineers, carry out the stripping.
- 33.3The CAPACITY OF AN ENGINE shall be limited to the measurement of the bore and stroke only. The method of the calculation stipulated in GCR 37 shall apply. Each cylinder shall be measured individually and the engine capacity shall be the sum of such individual volumes.
- 33.4Where regulations specify the use of unaltered STANDARD PARTS the scrutineers/technical team shall be entitled to remove suspect parts and compare them to parts that are available from the supplier of such parts. Parts so removed shall be sealed in containers or bags and shall only be opened at the time and place advised to the competitor. The competitor will be deemed to be suspended for as long as it may take the technical team or scrutineers to establish whether or not the parts are standard. The technical team and the scrutineers shall act without delay and deal with the legibility or otherwise of the parts expeditiously. In respect of all engine and parts used the onus of proof in respect of the legality of the part or engine remains that of the competitor. If the competitor is not able to prove the legality of the part or engine to the satisfaction of the Technical Consultant the part will be impounded and delivered to DO4SA. A formal hearing will be convened within 21 days of the Wednesday following the event to determine the legality of the part. Regulations regarding representation per GCR's apply.

- 33.5 Samples of FUEL shall be taken at the discretion of the Clerk of the Course. Please refer to the guidelines in respect of fuel sampling as contained in GCR 240.
- 33.6The organisers, the duly appointed technical consultant (or failing him the chief scrutineer) and the Clerk of the Course, acting in concert, shall be entitled to instruct a competitor to swap to a control fuel as follows:
  - i) The swapping procedure shall take place in a controlled environment and may, notwithstanding any regulation to the contrary be conducted on the infield of a circuit;
  - ii) The competitor shall drain all fuel from his vehicle under the supervision of a duly appointed official;
  - iii) The organiser shall have a supply of fuels complying with these regulations as well as any permitted additives available;
  - iv) The competitor shall be entitled to elect whether or not he wishes the drained fuel to be bottled for testing purposes at the time of draining and shall be barred from exercising his right to have the fuel tested if he does not make such an election at this point;
  - v) All details of the procedure shall be properly documented and countersigned by the official and the competitor concerned;
  - vi) The competitor shall be liable for the reasonable cost of the fuel and additives supplied and nonpayment of these costs shall constitute sufficient grounds for the refusal of the entry of the competitor from the next or similar event;
  - vii) The competitor shall also be entitled to recover the fuel or balance of the fuel drained from his vehicle as the case may be.
- 33.7 In respect of compliance with MINIMUM WEIGHTS the following:
  - i) Competitors are reminded that vehicles can be checked at any time and it is therefore advisable to ensure that adequate compensation is made for the loss of fluids during an event.
  - ii) All checking shall be done on the authority of the duly empowered race officials only and shall be properly supervised and recorded.
  - iii) The competitor whose vehicle is to be weighed shall be required to declare whether or not the vehicle is intact when presenting the vehicle for weighing.
  - iv) Competitors who allege that they have lost parts of their vehicle in a just-completed race shall be afforded an opportunity to indicate which portions have been lost. They shall be required to satisfy the chief scrutineer and / or the technical delegate that the parts had been lost in the race just completed. Once the said officials are satisfied they shall be entitled to remove a similar part from elsewhere on the vehicle and weigh the part. The weight of the part shall be added to the weight of the vehicle. If the part so indicated do not make up the weight needed to have the vehicle equal the minimum weight or the officials are not satisfied that the part was lost in the race the competitor will be deemed to have been underweight.
  - v) A vehicle that had sustained race damage, as set out above shall be allowed a kilogram in respect of the weight limit itself as well as the criteria regarding the imposition of penalties. All other vehicles shall comply.
- 33.8 The provisions of GCR 256 in respect of incidental findings shall apply.

#### OT34. FIRE EXTINGUISHERS

- 34.1 A minimum of 16 fire extinguishers shall be available for use on track before the start of an event.
- 34.2 The extinguishers shall all be certified and in working order. The extinguishers utilised shall be of the stored pressure type containing ABC powder type and shall have a minimum capacity of 9 kg. The extinguisher shall furthermore be serviced by an SABS approved service provider and shall bear proof of such service.
- 34.3 These shall be positioned as follows: two in the pits, 1 at each corner (4 in total), two in the center of the track. The remaining extinguishers shall be on board a rescue or recovery vehicle to facilitate swift deployment.
- 34.4 Circuits that have separate pit areas, at opposite sides of the track, for different classes of vehicles shall be required to place two extinguishers in each such pit area as well. The amount of extinguishers required shall also increase accordingly.
- 34.5 Extinguishers used during the event shall be replaced from reserve supplies before the event may continue.

## OT35. RECOVERY VEHICLES

- 35.1A minimum of two breakdown vehicles, well equipped with a suitable drag-off rope/line, must be in attendance at all times.
- 35.2These vehicles shall be equipped with properly mounted push bars set up at the mid-point of the midget class rear bumper.
- 35.3 For regional, national, national championship or international events, the above requirement shall be increased to three and must remain as such for the complete duration of the event.

# OT36. PENALTIES

- 36.1 Any breach of these regulations, the GCR's, the SSR's or the SR's for any competition shall be penalised by the appropriate official whether or not any penalty is specified for such breach.
- 36.2 The Clerk of the Course shall be entitled to impose one or more of the following penalties for contravening a particular rule for which no specific penalty is prescribed:
  - i) A reprimand;
  - ii) A points or time penalty;
  - iii) The amendment of the classification with the culprit being moved down the classification.
  - iv) The exclusion of a competitor
  - v) load up instruction which requires the competitor, his family and crew to leave the venue.
- 36.3 The penalties listed below shall be imposed by the Clerk of the Course (or technical consultant in respect of technical infringements) once it has been established that a competitor has contravened these regulations. The Clerk of the Course may request further action by the MSA Stewards or Do4sa if the circumstances warrant same. The penalties are:

OFFENCE	PENALTY
36.4 ENTERING AN EVENT WITHOUT A VALID MSA DIRT OVAL LICENSE	WITHDRAWAL OF LICENSE
36.5 FAILING TO PRESENT VEHICLE AT SCRUTINEERING OF ATTENDING DOCUMENTATION	EXCLUSION FROM THE EVENT
36.6 FAILING TO PRESENT VEHICLE AT SCRUTINEERING OF ATTENDING	PLACEMENT AT THE BACK OF THE GRID FOR HEATS NOT DETERMINED BY THE RESULTS OF OTHER HEATS OR

BEING DROPPED 2 POSITIONS IN THE HEATS DETERMINED BY QUALIFYING TIMES.
PLACEMENT AT THE BACK OF THE GRID FOR HEATS
EXCLUSION FROM HEAT ESCALATING TO EXCLUSTION FROM EVENT.
PLACEMENT AT THE BACK OF THE GRID FOR THE HEAT CONCERNED ESCALATING TO EXCLUSION FROM EVENT FOR REPEATED OR SERIOUS OFFENCES.
EXCLUSION FROM THE EVENT ESCALATING TO A HEARING WHICH COULD RESULT IN A BAN.
EXCLUSION FROM EVENT
PLACEMENT AT THE BACK OF THE GRID OF THE HEAT CONCERNED ESCALATING TO EXCLUSION FROM THE HEAT FOR REPEATED OFFENCES OR FOR SERIOUS OFFENCES THE EVENT.
PLACEMENT AT THE BACK OF THE GRID
PLACEMENT AT THE BACK OF THE GRID OF THE HEAT CONCERNED ESCALATING TO EXCLUSION FROM THE EVENT FOR REPEATED OR SERIOUS OFFENCES.
EXCLUSION FROM HEAT ESCALATING TO EXCLUSION FROM EVENT
PLACEMENT AT THE BACK OF THE GRID OF THE HEAT CONCERNED ESCALATING TO EXCLUSION FROM THE EVENT FOR REPEATED OR SERIOUS OFFENCES.
PLACEMENT AT THE BACK OF THE GRID FOR THE HEAT CONCERNED ESCALATING TO EXCLUSION FROM EVENT FOR REPEATED OR SERIOUS OFFENCES.
EXCLUSION FROM THE HEAT
EXCLUSION FROM THE HEAT
EXCLUSION FROM THE EVENT
PLACEMENT AT THE BACK OF THE GRID OF THE HEAT CONCERNED ESCALATING TO EXCLUSION FROM THE EVENT FOR REPEATED OR SERIOUS OFFENCES.
PLACEMENT AT THE BACK OF THE GRID FOR THAT HEAT IF THE RACE IS STILL BEING RUN. WHEN THE RACE IS COMPLETE, A PENALTY RANGING FROM PLACING THE AGGRESSOR BEHIND THE AGGRIEVED COMPETITOR TO EXCLUSION FROM THE HEAT OR FROM THE EVENT FOR REPEATED OR SERIOUS OFFENCES.(IN THE SOLE DISCRETION OF THE COC)
PLACEMENT AT THE BACK OF THE GRID FOR THAT HEAT IF THE RACE IS STILL BEING RUN. WHEN THE RACE IS COMPLETE, A PENALTY RANGING FROM PLACING THE AGGRESSOR BEHIND THE AGGRIEVED COMPETITOR TO EXCLUSION FROM THE HEAT OR FROM THE EVENT FOR REPEATED OR SERIOUS OFFENCES.(IN THE SOLE DISCRETION OF THE COC)
PLACEMENT AT THE BACK OF THE GRID OF THAT HEAT IF THE RACE IS STILL BEING RUN. IF THE OFFENCE IS BROUGHT TO THE ATTENTION OF THE OFFICIALS AFTER THE COMPLETION OF THE RACE – EXCLUSION.

36.25	PUSHING A COMPETING VEHICLE ON THE TRACK OR OVER THE FINISH LINE WITHOUT PERMISSION FROM THE COC.	IMPOSITION OF A MEANINGFUL POINTS PENALTY TO EXCLUSION FROM A HEAT ESCALATING TO EXCLUSION FROM AN EVENT FOR SERIOUS OR REPEATED OFFENCES.
36.26	CONTRAVENTION OF TECHNICAL REGULATIONS OR SPECIFICATIONS WHERE AN ADVANTAGE IS GAINED. REFER GCR 176(i)(a) AND (b). THE USE OF ILLEGAL FUELS OR FUEL ADDITIVES OR THE CONTRAVENTION OF TECHNICAL REGULATIONS IN RESPECT OF ENGINES AND MINIMUM WEIGHTS.	AS A MINIMUM — EXCLUSION FROM THE EVENT. DEPENDING ON THE NATURE OF THE IRREGULARITY FURTHER PENALTIES RANGING FROM EXCLUSTION FROM THE RESULTS OF THE PREVIOUS 3 EVENTS FORMING PART OF THE SAME SERIES TO A 6-MONTH BAN FROM RACING.
36.27	REFUSAL TO SUBJECT A VEHICLE TO POST-EVENT SCRUTINY OR FAILURE TO STRIP A VEHICLE WHEN SO INSTRUCTED OR TO PROVIDE FUEL SAMPLES OR TO SWAP FUEL WHEN SO INSTRUCTED.	EXCLUSION FROM THE EVENT
36.28	UTILISING AN ILLEGAL TYRE	EXCLUSION FROM THE EVENT
36.29	HAVING CONSUMED ALCOHOL OR OTHER ILLEGAL SUBSTANCE.	REFER TO MSA ANTI-DOPING CODE
36.30	DISORDERLY CONDUCT AS SET OUT IN GCR172. THIS INCLUDES DISORDERLY CONDUCT BY THE ENTRANT OR THE PIT CREW.	SUSPENSION OF THE COMPETITOR FOR 6-MONTHS FOR A 1 <sup>ST</sup> OFFENCE, IRRESPECTIVE OF WHETHER THE COMPETITOR CAUSED THE INCIDENT HIM/HERSELF OR WHETHER CAUSED BY HIS/HER PIT-CREW. SECOND AND FURTHER OFFENCES SHOULD BE PENALISED BY DOUBLING-UP THE PREVIOUS SENTENCE. AS A PRACTICAL GUIDE, OFFICIALS DEALING WITH THESE ISSUES SHOULD ENSURE THAT THE COMPETITOR, HIS/HER VEHICLE AND CREW ARE LOADED-UP AN LEAVE THE PREMISES IMMEDIATELY.
36.31	FORCING A YELLOW OR RED FLAG	PLACED AT THE BACK OF THE GRID PENDING A POST- RACE SCRUTINY OF FACTS. IF GUILTY, EXCLUSION FROM EVENT.

# ALL SUSPENSIONS AND FINES TO BE ISSUE BY THE MSA STEWARD AFTER A HEARING ON THE NIGHT OF THE RACE.

### **IMPORTANT NOTICE**

The stated penalties are listed for the convenience of the competitors and officials alike but do not override any other penalties contained elsewhere in these rules and regulations, in the sporting regulations or in the GCR's.

- 36.32The technical consultant shall be entitled to impose a penalty for technical infringements without the need for a hearing in terms of GCR 175.
- 36.33The Clerk of the Course shall similarly be entitled to place a competitor at the back of the grid, exclude him from a race by means of the black flag and warn him/her by means of the black and white flag without the need for a hearing where this sanction is called for in the race regulations.
- 36.34The Clerk of the Course shall be entitled to impose penalties without the need for a hearing if the competitor refuses or neglects to report to the Clerk of the Course. He shall be similarly entitled if the competitor departs from the hearing without waiting for the Clerk of the Course's decision or subjects him to abuse. In cases other than where the competitor was excluded from a race due the use of the black flag, the Clerk of the Course shall communicate his decision and penalty to the competitor verbally. He shall be required to put same in writing as soon as circumstances permit, but shall do so immediately if he is advised of the competitor's intention to protest that decision.
- 36.35 The Clerk of the Course shall specifically be empowered to change a warning flag into an exclusion from a race or heat after the completion of the race or heat in question. Similarly, the Clerk of the Course shall be able to take action and impose any penalty provided for in these regulations against any competitor irrespective of the completion of the race concerned and irrespective of whether or not the competitor received, saw or acknowledged any such signal.
- 36.36The penalty for dangerous driving may be reduced if the offence relates to an isolated incident. The penalty for acts of dangerous driving shall be imposed even if such acts were involuntary.
- 36.37The penalty for failing to attend competitors briefing may only be imposed if such a briefing is specified in the SR's for the event.

- 36.38 The MSA Stewards of the meeting shall be authorised to ISSUE, fines, and periods of suspension for serious violations of the rules by a competitor .All protests hearings must take place on race day and chaired by the MSA Steward. Fighting and the abuse of officials shall be considered to be such violations. It is however that the Clerk of the Course discharges his duties in respect of such incident to the full extent of his powers. Stewards should bear in mind that if the Clerk of the Course has not discharged his duty their actions as stewards may be unlawful and they, the stewards, expose themselves to disciplinary action.
- 36.39 Any penalty under these regulations shall not prevent any further appropriate action by DO4SA. Race officials are reminded that they have extensive powers on the day and as such matters that are not dealt with by them on the day of the event will not be investigated by DO4SA unless the ability of the official who could or would not deal with the incident is not also investigated by DO4SA.
- 36.40 All penalties imposed by the MSA STEWARD shall be posted on the notice board as soon as possible after the hearing with the competitor concerned.

#### OT37. CARD SYSTEM

- 37.1Any competitor who is excluded from a race for any driving conduct related infringement shall be Summonsed to a hearing at which he/she will most likely receive a yellow card warning. Such hearing is to be held within 7 working days of the infringement.
- 37.2A second yellow card offence shall receive a red card. It follows that two yellow cards cannot be issued for offences occurring within the same heat (the most serious offence is considered.)
- 37.3 These penalties shall be recorded in the competitor's scrutiny book and shall be reported to DO4SA.
- 37.4A competitor who receives a red card for the first time shall be suspended from all forms of motorsport until 2 race meetings have been run at his home circuit for the particular class.
- 37.5 Once the suspension is served the red card falls away and the competitor has a clean slate.
- 37.6 A second red card shall mean a 4 race meeting ban, a third an 8 meeting ban and so on.
- 37.7 A competitor who is serving a ban may not participate in any event of any status anywhere in the country.
- 37.8A yellow card shall lapse after a competitor has participated without further incident in at least 50% plus one of the races (not events) held at his home circuit during the six months following the receipt of the yellow card.
- 37.9It shall be the duty of the competitor to affix a 45 x 30 cm yellow sticker onto the outside (in relation to the track when racing) rear-side window in saloon cars or the outside of the main wing in respect of open wheel vehicles.

#### OT38. VIDEO FOOTAGE

- 38.1In view of the high incidence of video recordings found at oval racing events race officials are more and more regularly confronted with the demand that video footage must be viewed. These demands are mostly made to implore the officials to act against a competitor. Conversely video footage is produced by competitors in support of a demand that a penalty that was imposed must be reversed.
- 38.2The Clerk of the Course shall refer all such footage to a television adjudicator. This adjudicator shall be a graded Clerk of the Course at regional and national championship status events. At other events he shall be a person well versed with the rules of oval racing, typically a retired driver. This adjudicator will be deemed to be a judge of fact.
- 38.3The adjudicator shall communicate his findings to the Clerk of the Course. The findings of the adjudicator shall be final.
- 38.4The Clerk of the Course shall thereafter act in accordance with the findings and may penalise the offending competitors.
- 38.5Where footage is presented as part of the protest or appeal procedure the footage shall be viewed by the stewards of the meeting, tribunal or Court of Enquiry as the case may be. These parties are entitled to request the adjudicator to advise them.
- 38.6 Where Clerks of the Course or Stewards are called upon to deal with unruly behaviour on track it is advisable that they ascertain whether or not there is video footage available prior to holding the hearing. Such footage

often highlights the seriousness of the behaviour and generally places the sequence of events into perspective.

#### OT39. DECISIONS OF THE OFFICIALS

- 39.1 Given the nature of the sport, officials have to decide potentially contentious issues within split seconds, without the luxuries of video footage and replays.
- 39.2 Hence any decision made by the officials shall be deemed to be in good faith and unless a decision can be rectified by agreement between the parties (normally the aggrieved competitor and the culprit) any decision taken by the officials shall stand and shall not be protest-able until the racing is complete.
- 39.3 No protest shall be permitted unless the aggrieved competitor has followed the query procedure.
- 39.4 It is therefore possible that a competitor may be incorrectly penalised. Unfortunately, it is not possible to legislate for human error and oval racing has to accept these as part of the sport just as many other sporting codes have to do.
- 39.5 In incidents where a thorough investigation of the facts / video evidence reveals that some other party is guilty that party may be penalised.
- 39.6 Neither the Clerk of the Course nor the stewards shall be entitled to order the re-run of a race irrespective of the incident, the damage suffered by the aggrieved competitor or the effect the incident has on his standing in an event, championship or series. They shall however bear these factors in mind when taking action against the offending competitor.
- 39.7 The Clerk of the Course or the Stewards may, after a hearing regarding an incident that they witnessed or was reported to them or was protested be entitled to alter the point at which a race was completed or award points to the aggrieved competitor to address such an incident. Please refer OT30.2. To clarify this, it must be understood that intervention of this kind must be reserved for offences/incidents where the innocent party has suffered prejudice and must be reflected by action against the transgressor, at least equal to the benefit gained over the aggrieved competitor. It would be appropriate for two or more competitors to have the same race result as a result after intervention by the race officials. Should such an intervention lead to a tie in points the competitor who was penalised shall defer to the others.
- 39.8 If the competitor who was elevated into a position of a tie as a result of this intervention, he/she shall defer to the other competitor on equal points. It is stressed that this regulation is not meant to resolve incidents where no blame can be apportioned.

# TECHNICAL AND CONSTRUCTION REGULATIONS

#### CR1. PROTECTIVE CLOTHING

- 1.1 Full fire retardant overalls are compulsory.
  - i) Minimum requirement is a level 1, single layer race suit.
  - ii) The composition of the suit even if small percentages are used may not be of a polyester, nylon or synthetic material.
  - iii) "Mechanic" overalls will not be permitted.
  - iv) Two-piece race suites are permissible on condition that they comply with above requirements.
  - v) No pushing up of sleeves permitted whilst racing.
  - vi) Fire retardant gloves are compulsory.
  - vii) Open fingertip gloves are not permitted.
  - viii) Neck braces shall be mandatory for all open wheeled classes and competitors under 18years and recommended to all other classes.
  - ix) Only full face helmets to be used( motorcross, full face and modular)
  - x) Race boots or leather shoes covering ankles are compulsory.

## CR2. SAFETY REGULATIONS

## APPLICABLE TO CLASSES

- 2.1 All joints and seams in the construction of the vehicle shall be properly mitered and welded.
- 2.2 Methanol- it shall be mandatory that all methanol storage containers (jerry cans) be clearly marked with the letters "ME" or the word METHANOL.
- 2.3 All flammable items such as dashboards, plastics, carpets, upholstery and hood lining must be removed from all cars.
- 2.4 All bitumen cladding on the interior of the vehicle has to be removed.
- 2.5 All lights and windows must be removed and only the rear side windows may be replaced with transparent / translucent Lexan™.
- 2.6 Under no circumstances may a vehicle compete without a secured bonnet. The purpose of this is to prevent the bonnet from dislodging, and secondly to protect the driver from burns of any nature.
- 2.7 All piping (brakes and fuel) and wiring must be installed above the floor board or chassis height.
- 2.8 All saloon vehicles shall be able to self-start and self-starters have to be in a good working condition.
- 2.9 No "LED" (Light-Emitting-Diode) lighting strips are permitted.

## CR3. BATTERIES

- 3.1 It shall be mandatory for batteries to be bolted down with bolts with a diameter of at least 8mm.
- 3.2 Battery shall be bolted down by way of a cross bracket.
- 3.3 Batteries fitted in the competitor's compartment shall be mounted in a leak proof compartment, e.g. Boat battery box and still be bolted down inside the box and box cover need to be strapped down as well.
- 3.4 In all instances batteries should be easily accessible for scrutineers to inspect.

## CR4. BONNETS AND BOOTLIDS

- 4.1 All boot-lids must be retained, and may be replaced with fibre-glass replicas.
- 4.2 All bonnets to be held in place on all-four corners by clips or on two corners by clips and the remaining two corners by plates.
- 4.3 All bonnet and/or bootlid clips to have reinforcing plates to prevent tearing of fiberglass.
- 4.4 No add-ons for aerodynamics may be bolted, welded or riveted to bonnet except for mud visor in front of driver.(400mmx150mm)

4.5 The rear boot panels (meaning the portion between the tail lamps) of "tin-tops" shall be retained.

## CR5. BRAKES AND BRAKE LIGHTS

- 5.1 Brakes are mandatory on all vehicles in all classes.
- 5.2 Vehicles are to brake on three of four wheels.
- 5.3 Brake-lights are optional.
- 5.4 No ABS or any other electronic driving aids are permitted;

#### CR6. BUMPERS

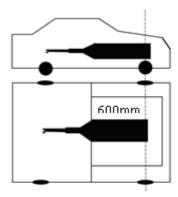
- 6.1 All piping utilized for the purpose of bumpers shall remain in a single tubular form, it follows, that under no circumstances may any of these pipes be filled in any manner or have additional smaller tubing inserted to the inside of the larger pipe. No more than four(4) mounting points to the frame, front and rear bumper.
- 6.2 Bumper specification for Club, Regional and National status classes are restricted to material not exceeding OD38 x 2mm thickness. (in single tubular form as per CR6.1 above)
- 6.3 All sharp ends have to be bent inwards into the body.
- 6.4 No external front bumpers in any classes except for the "Midget" class.
- 6.5 The internal bumper shall be shaped in accordance of the vehicle's front and rear silhouette. Additional radiator protection may be installed internally with no more than 4 mounting points.
- 6.6 No standard, original equipment steel bumpers are allowed.
- 6.7 All vehicles are allowed to fit plastic or fiberglass bumper covers to improve the aesthetic appearance of the vehicle, subject to the following:
  - i. A replica bumper cover is permitted front and back,
  - ii. Replica bumpers from another vehicle may be used,
  - iii. The cover shall not be reinforced and shall not be more than 4 mm thick, and
  - iv. The cover must be properly secured to the internal bumper,
  - v. No add-ons for aerodynamics may be bolted, welded or riveted to front or rear bumper
  - vi. Front splitter may not be further than 180 mm in front of the grill.
  - vii. All elements of the chassis shall end 100mm inside the bodywork at the **front and back** of the car. The chassis may not be used as or be part of a bumper system. In other words, the area protecting the fuel tank should be at least 100mm forward of the rear inner-bumper.

#### CR7. COMPETITION NUMBERS AND ADVERTISEMENTS ON COMPETITORS VEHICLES

- 7.1 Numbers shall contrast their background. Numbers must be very easy for the Lap-scorers to read. It follows that the background should not be "busy" (also referred to as "noisy" in graphic terms).
- 7.2 Numbers shall be professional looking (vinyl or other material used by professional sign-writers. No free-hand numbers allowed.
- 7.3 Advertisements and slogans may not be derogatory, defamatory or discriminatory.
- 7.4 The car's number shall be displayed in four different places on the car:
  - On both sides (Wing endplates 300mm X 300mm with a 50mm stroke (SSR 4) OR on bodywork 400mm high with a stroke of 75 mm.
  - ii. On the Roof Panel **500mm x 500 mm** (number to be facing the COC / Lap-scorers)
  - iii. On the Visor Panel as large as the dimensions will allow. (on "outside" side closest to COC / Lapscorers)
- 7.5 Numbers "1", "2" and "3" are reserved for SA Champions only.
- 7.6 All vehicles competing at DO4SA events need to display numbers approved by DO4SA and entered into the DO4SA register.

## CR8. ENGINE AND ENGINE POSITIONING:

- 8.1 An "Engine" shall be defined as the head, block and sump" area.
- 8.2 Tin-top vehicles which were manufactured by the OEM with a rear-mounted engine may be used, however, the position of the engine may not be altered at all, e.g. Volkswagen Beetle.
- 8.3 The "rear face" of the engine refers to where the engine meets the bell-housing of the gearbox.
- 8.4 The "rear face" shall not be more than 600mm rearwards from a line drawn through the center of the two front-wheels.
- 8.5 The engine may have a maximum offset to the left or right of the centerline of the vehicle (from front to back) of 50mm.



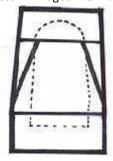
- 8.6 All oil filters and Sump plugs must be straped- all classes.
- 8.7 An oil catch tank, with a minimum capacity of 2 litres ,capable of accepting surplus oil and fumes from the engine shall be fitted. Connected by means of a flexible pipe or simalilar conveyance.

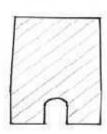
# CR9. EXHAUSTS

- 9.1 Exhausts which pass through the side of the car shall have a maximum height of 450mm from the ground.
- 9.2 Exhausts must be secured properly, especially on vehicles where the exhaust passes underneath the car.
- 9.3 Silencer boxes are mandatory for all classes, except for Late Models.
- 9.4 Exhaust exiting at the rear to protrude downwards with a maximum hight of 450 mm.

## CR10. FIREWALLS/ COCKPIT AREA

- 10.1All vehicles must have metal firewalls between the driver's compartment and engine, **and** between driver's compartment and fuel cell or fuel tank;
- 10.2 All firewalls are to be constructed of metal only. Neither plastic nor fibre-glass or rubber is acceptable.
  - 10.3 Fire walls will be free of any holes, other than where pipes are lead through with precise fitment;
- 10.4 Sketch Midget Fire Wall behind the competitor;





10.5 The cockpit area is between the four roll cage down pipes , the A and B pillars, shall be defined as the cockpit.

10.6 The cockpit area must separate the competitor from the engine compartment as well as from the compartments where the feul tank and rear mounted radiator is housed.

#### CR11. FLYWHEELS

- 11.1Cast steel/iron, aluminium and metal fly wheels permitted;
- 11.2Caution should be taken when lightening flywheels (safety first!!)
- 11.3Cast-Iron flywheels may NOT be lightened.

## CR12. FUEL TANKS AND FUEL PIPES

- 12.1It is highly recommended that purpose-built racing fuel tanks and/or bag-type fuel cells are used;
- 12.2 The wall thickness of metal fuel tanks shall be no less than 1mm;
- 12.3 A fuel tank breather, which shall vent externally, must be fitted to all fuel tanks and must be below the lowest level of fuell tank.
- 12.4 An airtight non-return valve is advisable (in the fuel-breather pipe)
- 12.5 The fuel tank cap must be non-vented type
- 12.6The fuel tank shall be mounted in the boot space of the car behind the firewall wall; Fuel tanks must be mounted in a separate compartment to the competitor.
- 12.7 Fuel tanks must be securely mounted to the boot floor or the chassis with bolts or straps.
- 12.8A fire wall must be constructed to separate the competitor from the fuel tank and fuel pumps as well as the breather system;
- 12.9 The fuel lines must run above the floor or lowest chassis pipes and Fuel pumps may not be fitted in the cockpit area.
- 12.10 **METHANOL:** A luminous orangedot, with a minimum diameter of 200mm is to be displayed on both sides of the vehicle. The wording "Me" or a black lightning bolt shall be printed on the dot in letters at least 130 mm high. The letters will have a stroke of 20 mm.

#### CR13. KILL SWITCH

- 13.1 All vehicles shall have kill switches fitted;
- 13.2 Kill switches to be marked red;
- 13.3 The fitment of the kill switch fitted shall be within the competitor's reach;
- 13.4 If the internal kill switch cannot be reach by an official easily, it shall be mandatory for an additional external kill switch to be fitted;
- 13.5 Kill switches need to break the ignition and electric fuel pump circuits and battery circuits.

# CR14. MIRRORS

- 14.1 Mirrors are optional in all classes.
- 14.2 NO OUTSIDE MIRRORS

#### CR15. MUDFLAPS

15.1Mudflaps in all classes are optional

## CR16. PROPSHAFT / DRIVE-SHAFT / RUNNING-GEAR PROTECTION

## **GENERAL - PROPSHAFT PROTECTION HOOPS:**

- 16.1 Drivers must be protected, from propshafts, by at least one steel band with a minimum width of 50 mm and thickness of 5mm, which is bolted or welded to the chassis;
- 16.2 This band is to prevent a broken shaft from lifting and coming into the cockpit area;
- 16.3 The band shall be a maximum of 150 mm behind the front yoke.

- 16.4 Vehicles shall have a collar/hoop that would prevent the front end of the running gear (propshaft or torque tube) to lodge into the track should it break while the vehicle is in motion;
- 16.5 The hoop shall be a maximum of 150mm from the yoke with a strap 50mm x 5mm.

#### CR17: RACING SEATS

- 17.1Race seat shall have holes where seat belts can be let through, one on each side of the seat for lap belts and two on the back rest at shoulder height for the belts to exit to its mounting points;
- 17.2Only bucket race seats permitted, no adjustable back rest reclining road car or race-styled (as sold in auto-accessories shops) seats will be permitted;
- 17.3 Fibreglass seats must have a minimum thickness of 8mm and have to be bolted with tear plates;
- 17.4 Tear plate specification shall be at least 50x50x2mm on EACH bolt.
- 17.5Seats are to be mounted with a support bar across, behind the backrest of the seat, just below shoulder height;
- 17.6 Fibreglass seats have to be padded and covered with a non-flammable material;
- 17.7 Aluminium seats are permitted and shall have a minimum thickness of 2.5mm, or be "FIA-Approved";
- 17.8Vehicles that have cracked and broken seats shall automatically be excluded from the event, without any further negotiations;
- 17.9Seats purchased from accessory shops with a frame without solid support over 100% of the surface area, excepting for holes to allow for seat belts, breathing, etc. will **not** be allowed.

## CR18. RADIATOR SAFETY CONTROL

## 18.1 ALL RADIATORS:

- i) All joints shall be securely clamped;
- ii) All piping to and from the radiator which is outside of the engine compartment, other than the joints and the overflow pipes, shall be of steel;
- iii) A lexan shield shall be fitted directly behind and on passenger side of competitor, fitted from the floor to the roof of the vehicle for Radiators mounted behind the competitor. The water inlet and outlet of radiator shall face backwards and be double clamped. The water pipes running from the front shall have steel u bends with a rubber joint clamping to radiator.

## 18.2 RADIATORS LOCATED IN THE DRIVER'S COCKPIT:

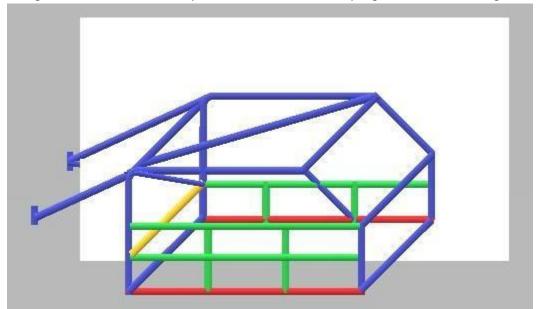
i) Not permitted.( next to the competitor) see CR 10.5 and CR 10.6

# CR19. SAFETY-NETS, ARM RESTRAINTS / PROTECTOR-PLATES ON OPEN-WHEELERS:

- 19.1Arm restraints are recommended, especially for open-wheelers, e.g. Midgets, so as to protect the competitor from their arms leaving the cockpit area should the vehicle roll.
- 19.2Safety-Nets are optional, and must have "Quick-release clips" fitted which must be within easy reach of the competitor.
- 19.3 It shall be mandatory for all open wheeled vehicles to have a protector plate to the right hand side enclosing the cockpit up to the height of the competitor's shoulder when seated.

## CR20. ROLL-CAGES:

- 20.1It is compulsory for all vehicles to have a fully constructed roll-cages with no offset (unless allowed for in a specific class, in which case this will be specified in the class rules);
- The roll-cage has to be designed so to protect the competitor and ALL joints and seams in the construction roll cage are to be properly mitred.
- 20.3 The diagram below is a minimum requirement for all vehicles excepting Late Models and Midgets.



- 20.4The cross bar behind the driver seat(yellow) shall be mounted flush directly behind the backrest of the seat in order to support the backrest. This cross bar shall be just below the shoulder of the driver when seated;
- 20.5 Additional cross bars may be added to the cage;
- 20.6Where the roll cage has lost strength due to bends, triangulated bracing to reinforce the cage is recommended;
- 20.7 All welding points to be welded 100% on space frames and the no less than 75% on tin-tops;
- 20.8Where the driver's helmets could come into contact with the safety cage, a non- flammable padding is recommended;
- 20.9Sissy bars (Green) shall be fitted in such a manner that the competitor's hips and knees are completely protected when he/she is strapped into the seat.
- 20.10 The sissy bars (Green) should be constructed in such a manner that in an event of a T-bone incident the other vehicle would collide with the sissy bar;
- 20.11 Two Side-Impact Protection Bars ("sissy bars"), shall be welded on the inside of both front doors horizontally to the two down pipes or legs of the roll cage.
- 20.12 The sissy bar shall preferably follow the contour of the door, especially on the driver's side.
- 20.13 The sissy bar shall have two vertical supports, welded to the sill (Red), spaced so that they divide the area between the back of the seat and the front lower corner of the driver's side door into at least three equal areas.

- 20.14 The sissy bars may be replaced by cross arrangement, securely welded together at the cross-over point. The cross shall be installed in such a fashion that the top ends are in line with the top of the door panel. The bottom ends shall be at least 75 mm above the sill height. The cross point shall be gusseted with 2 mm plate for a distance of 100 mm from the crossover point.
- 20.15 No offset frames allowed in any four-cylinder class.
- 20.16 The material used to construct the main-frame (as in diagram above) has a minimum requirement of either 38mm (diameter) x 2mm (wall thickness) round tubing. American saloons and lexus cars may use 38mm x 38mm x 2mm square tubing, except for top, front and rear rolling hoops, above green sissy bars, they must be constructed by 38mmx 2mm round tubing. All other *structural* piping to be a minimum of 32mm x 2mm round or 32mm x 2mm square tubing.
- 20.17 The cage shall be fitted with a base plate 100mm x 100mm, welded, or bolted to the floor, sill, or wheel arch of the vehicle if the original body of a standard vehicle is utilized. The cage of a purpose built chassis shall form an integral part of the chassis itself and shall accordingly be welded directly onto the chassis legs.

## CR21. SEAT-BELTS

- 21.1Quick release seat-belt and shoulder harness (MINIMUM 4-POINT) are mandatory;
- 21.2 No hand stitching or homemade alterations permitted to belts;
- 21.3 Only SABS or International standard belts permitted;
- 21.4 FIA safety belts: date from manufacture, 5 years plus MSA compensation of 5 years totalling a 10 year lifespan.
- 21.5 SFI safety belts: date from manufacture, 2 years plus MSA compensation of 2 years totalling a 4 year lifespan.
- 21.6 Safety belts and driver seats must be secured to the roll cage or frame (not to the floor-pan);
- 21.7Existing vehicles that have seat belts and seats mounted to the floor pan have to be supported by 50mm x 50mm washers or 75mm x 2mm in diameter tear plate; The installation of the cross bar shall be mandatory for this fitment;

#### CR22. SEMI-SPACE FRAMES AND SPACE-FRAMES

### **DEFINITIONS:**

"SPACE-FRAME" or "FULL-FLEXI" refers to a racing car with a body-shell which is detachable from a tubular frame constructed of either square, rectangular or round tubing.

"SEMI-SPACE FRAME" or "SEMI-FLEXI" refers to: These vehicles are converted from the original road going vehicle above and retain elements of the road going vehicle such as the roof and where sections of the floor pan or sections of the interior compartment (A and B pillars) have been cut away and also where a tubular structures carry drive train or suspension unit.

"TIN-TOPS" still maintain the original construct of the car, fitted with roll-cages and safety-features for racing purposes as per the CR's and class-specific rules. As the name implies, the panels of the car are still the original material.

"B-PILLAR" is the pipe which runs from the base of the frame behind the driver, over his/her head and down to the opposite side of the frame. In a road-car it would be defined as the piece of metal between the front and back door of the vehicle.

## **GENERAL**:

- 22.1All new-constructed or majorly-altered vehicles shall be inspected and approved for safety by a chassis-builder duly appointed by the competitor's home-base (club). The purpose of the inspection is to establish the safety of the vehicle's construction. Such inspection shall be conducted once an appointment has been confirmed by the chassis-builder via the competitor's home-base.
- 22.2It is mandatory that the driver shall gain access to the cockpit area via the driver's-side of the vehicle through the door;
- 22.3The driver's door may be cut-away at the lower window aperture should it hinder the driver's ability to easily access or escape the cockpit. This cut-away shall not exceed 100mm in height.
- 22.4Driver's doors may be made fully removable, provided they are securely fitted during races and that the securing pins shall be removable from the outside;
- 22.5 All semi-space and full-flexi's shall have a reinforced floor area for the driver's seat and feet;
- 22.6 Tin-top cars shall maintain their original roof-structures (may not be altered);

## CR23. TOW-HOOKS

- 23.1.1 All vehicles are to install tow hooks to the front and back of the vehicle; These may not protrude beyond the bumpers of the vehicle;
- 23.1.2 It should be clearly marked in red, yellow or orange.

## CR24. WEIGHTS

- 24.1Adding weight to a vehicle shall be done by fitting ballasts;
- 24.2Ballasts are non-functional material which are added to increase vehicle weight. All ballasts must be securely fixed to the structure of the vehicle by means of bolting;
- 24.3 No weight tolerance in addition to the specified class-weights will be permitted;
- 24.4A vehicle may be weighed at any time during the event and remains the responsibility of the competitor to ensure the vehicle in which he is competing complies to the class weight regulation;
- 24.5 Weights including driver:
  - i) 1660cc, 2100cc and Hotrods = 800kg,
  - ii) American Saloon = 1050kg,
  - iii) Lexus = 1000kg,
  - iv) Heavy Metals 1050kg,
  - v) Late Models; 2200lbs (Crate) and 2300lbs (Supers)
  - vi) Midgets = 550 kg.

# CR25. WELDING

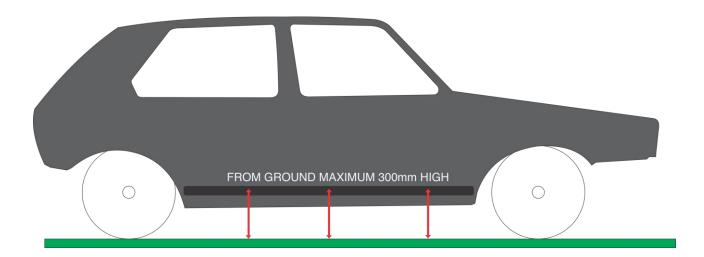
25.1 All joints and seams in the construction of the vehicle are to be properly mitred and shall be welded as per CR20.7;

#### CR26. WHEELS AND TYRES

- 26.1 No double wheels are permitted.
- 26.2 Tyre identification under no circumstances may the tyre-manufacturer's original extruded side wall markings, indicating manufacturer's details, size, profile, country of origin, ratings, serial numbers and batch codes be removed or altered;
- 26.3 All wheel studs, nuts and bolts are to be fitted and in place;
- 26.4 Only open ended nuts may be used;
- 26.5 Wheel bolts e.g., like most German vehicles, the bolt has to be fastened at least by the diameter of the bolt in depth;
- 26.6 Beadlock Rims are permitted on all-four wheels in all classes;
- 26.7 Grooving of tyres is permitted.
- 26.8 Rally tyres are not permitted;
- 26.9 All four wheels of vehicle must fit within the body of the vehicle except the Mididgetts.

## CR27. WHEEL AND BODY PROTECTOR

27.1Wheel and body sill protectors are mandatory and fitted between the front and the rear wheels maximum 300 mm high and must be fitted to all saloon vehicle classes;



- 27.2 The wheel and body protector must be straight and only curve inwards at each ends once mounted;
- 27.3 The material used shall not exceed 2mm thickness.
- 27.4 The protector may not protrude more than 30mm beyond the bodywork of the vehicle.
- 27.5No sharp edges or open round piping permitted, as these shall be rounded back to the chassis or mounting points.
- 27.6 No steel piping to reinforce wheel arches.

# CR28. WINDSCREENS AND GLASS WINDOWS

- 28.1No windscreens permitted;
- 28.2No glass permitted;
- 28.3Only clear Lexan  $^{™}$  allowed to cover rear side windows.

# CR29. WINGS

- 29.1Wings are permitted on all rear-wheel-drive vehicles in all classes. See individual class regulations for specifications;
- 29.2 Maximum of 2 endplates and 2 innerplates.

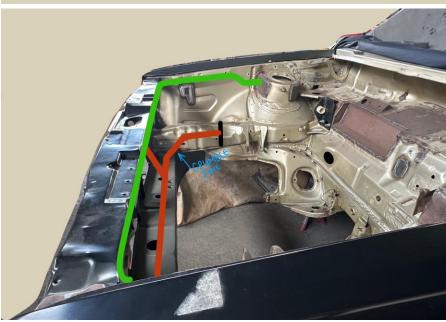
# CR30. SUSPENSION / SHOCK-ABSORBERS/ RIDE HEIGHT

- 30.1 Only one shock-absorber per wheel is permitted in all classes unless otherwise stated (four shock-absorbers per car);
- 30.2 Minimum ride height shall be 45 mm for dirt.

# CR31. TIN-TOP - SPECIFIC REGULATIONS:

- 31.1Bodies may not be lengthened, shortened or narrowed.
- 31.2The silhouette as seen from the front shall remain symmetrical, with no offset of either the body, frame or rollcage being permitted.
- 31.3 Pipe noses is allowed in tin top, from the strut tower forward with a crumble zone on top and bottom pipes, see attach sketch.





- 31.4The silhouette as seen from the sides, front and back shall remain the same as the original vehicle, with the latitude being allowed for repaired accident damage only.
- 31.5Vehicles of this type may not be re-bodied. The process of re-bodying requires the entire outer shell of the vehicle to be separated from the monocoque. Once this has been done, the vehicle shall be considered a "semi space frame".
- 31.6 All interior trim must be removed.
- 31.7The roof may not be lowered and any hole caused by the fitment of for instance a sunroof in the donor vehicle shall be closed.
- 31.8 The front valance and radiator carrier may not be mounted as per "space frame" regulations.
- 31.9The internal fender walls and wheelhouses shall be retained front and rear. The shaft tunnel shall be retained. The boot floor shall be retained.
- 31.10 The engine bay / cockpit bulkhead / firewall shall be retained but may be altered to accept another gearbox should the class regulations permit an alternative gearbox. The material utilised shall be sheet metal with a thickness of 1mm mounted on at least a  $15 \times 15 \times 2$ mm frame.

# 31.11 The complete roof-pillar structure of the vehicle shall be retained, meaning that NO cutting of the inner panels/and or skins of the A, B and C pillers.

- 31.12 The vehicle may be finished by the fitment of either the original plastic bumper or a fiberglass replica of the bumper.
- 31.13 The inner portion of all doors may be removed. In all classes, care must be taken to avoid edges that could cause injury.
- 31.14 Doors may be replaced with fiberglass replicas. In such cases, they shall retain the same shape and curve as the original door. These replica panels may be made of a one-piece construction. These replacements shall be properly mounted into place. The use of shapeless one-piece side sections, typically flat sheet, is not allowed.
- 31.15 Rear doors must be adequately secured in the closed position with fasteners.
- 31.16 The metal of the body may be replaced with metal or aluminium sheeting not exceeding 1.2 mm for metal and 1.6 mm for aluminium. Where fiberglass is used to replace sections of the external body shell it shall comply with the regulations for the replica bodies described below. In both cases the repair or replacement shall still resemble the replaced part and the contours of the body.
- 31.17 Only the bonnet, the front fender, the 2/4 doors and the tailgate/ boot lid may be replaced with exact replica parts. The "B" and "C" pillars may be repaired with fiberglass replicas. Once all the pillars have been replaced with fiberglass the car will be classified as a semi space frame.
- 31.18 The roll cage may not extend beyond the cockpit.
- 31.19 Under-trays are NOT be fitted.
- 31.20 All suspension parts (excluding shock absorbers) shall remain standard, albeit that they may be modified in accordance with class regulations. Therefore, a vehicle with a rose joint, A-arm front suspension shall be classed as a semi space frame if it still has the original body.

## CR32. FULL-FLEXI (SPACE-FRAME) - SPECIFIC REGULATIONS

- 32.1The body may consist of a single continuous shell or loose panels. It is recommended that the driver's door be a separate item.
- 32.2The silhouette, frame and roll cage as seen from the front shall remain symmetrical, with no offset being permitted.
- 32.3The vehicle may be finished by the fitment of either the original plastic bumper or a fiberglass replica of the bumper.

- 32.4Vehicles shall in essence retain the same shape and form as the vehicle on which it is modeled and must still be easily recognisable as being such a vehicle.
- 32.5 Bodies are to be secured to the chassis by means of support plates that shall not be more than 2mm thick.

  The length and width of these plates are free. These plates shall mount to support pipes or the chassis.
- 32.6Continuous mounting plates, running the full length of the joint areas are not permitted. It follows that the mountings shall be designed to secure the bodywork in a safe manner without creating reinforcements.
- 32.7No ribbing or reinforcing is allowed in fiberglass body panels or sections, except the boot lid, roof and bonnet. Ribbing and reinforcing is defined as using pieces of metal or plating to reinforce the structure of the panel.
- 32.8There shall be a properly reinforced floor-pan for the driver's area of the cockpit.

# SC 1 **ELIGIBILITY OF VEHICLE AND BODIES:**

- Any 2 or 4 door front wheel drive sedan or coupe body of which a minimum of 500 or more has been sold in South Africa as recorded by the Auto Data Digest;
- Only front wheel drive LDV with a maximum 850kg carrying capacity may be used, the cab loading bin and chassis must be one unit as per manufacturer.
- 1.3 Nissan NP200 / Ford Bantam / Mazda Rustler / Proton Arena /VW Golf Caddy / Opel Corsa
- 1.4 Prototypes, special imports or replicas will not be permitted
- 1.5 All the components of the vehicle must come from the specific car selected except where these regulations allow;
- 1.6 Space frames and semi space frames are not permitted;
- 1.7 The body shell and the materials originally used must be retained; excluding body panels
- 1.8.1 Body panels (doors, boot, bonnet and front fenders) may be replace by fiberglass panels.
- 1.8.2 If parts of the original floor pan must be replaced dew to rust, sheet metal with a min of 3mm must be used.
- 1.9 The boot catch panel between the C pullers maybe cut away and replaced with fiberglass. It shall be compulsory to fit additional piping between the C pullers that mount on the mono's to support the body structure. This piping must be flush against the fiberglass panel. See attached drawing.



- 1.10 All body panels that is replaced with fiberglass must have a minimum thickness of 2mm;
- 1.11 Fiberglass body panels to be solid shape and must follow the silhouette of the vehicle.
- 1.12 The original tail gate on LDV can be cut away to lighten the car. Is not permitted to cut any holes or replace tail gate with a plate
- 1.13 All spare parts fitted to the car shall be used without any alterations and modifications as they come from a road going vehicle, except where these regulations allow;
- 1.14 Wheel and body protectors (side skirts) are permitted;
- 1.15 The outside silhouette of all the doors, must remain standard and the driver door may not be cut away for easy access;
- 1.16 Rolling of wheel arches to fit bigger tires is permitted.

# SC 2. Fire Walls/Protector Walls

- 2.1 Vehicles must have metal firewalls between the driver's compartment and engine (welded,1.2mm) and between driver's compartment and fuel cell or fuel tank;
- 2.2 All firewalls are to be constructed of metal only;
- 2.3 Plastic, fiberglass and rubber fire walls is not permitted
- 2.4 Fire walls will not have any holes, other than where pipes and lead protrude fire wall with precise fitment

## SC 3. VEHICLE CONSTRUCTION

- 3.1 Original placement of engine, gearbox and suspension, no conversions allowed.
- 3.2 Four-wheel drive vehicles is not permitted
- 3.3 Pipe nose are allowed

# SC 4. DIMENSIONS AND WEIGHTS

- 4.1 All four wheels of the vehicle to fit within the body of the vehicle.
- 4.2 Weight The vehicle can be weighed anytime and must comply to a minimum weight of 800kg including driver.
- 4.3 No weight tolerances

## SC 5. BRAKES

## 5.1 Brakes General:

- 5.1.1 Brakes are mandatory on four wheels;
- 5.1.2 Brake lights are OPTIONAL;
- 5.1.5 Brake lights to work off brake pedal operated switch
- 5.1.6 No ON/OFF switches permitted on brake light system

# 5.3 **Brake Mechanism: -**

- 5.3.1 Only standard components as originally fitted to the car may be used;
- 5.3.2 In the event of a vehicle having drum brakes on all four wheels, the front and rear drums may be replaced with disc brakes from the same make but higher specification model, e.g. Datsun with Datsun;
- 5.3.3 Only original calipers to be used as per manufacturers' specification;
- 5.3.4 Brake pads or lining material is free, in other words friction material is free;
- 5.3.5 ABS or any other electronic driving aids is not permitted;
- 5.4 Brake balancing not permitted
- 5.5 All Handbrakes to be removed
- 5.6 Only VW Golf non return valve in brakebooster pipe

## SC 6. BUMPERS

- 6.1.1 No external steel bumpers, refer to internal bumper regulation;
- 6.1.2 All piping utilized for the purpose of bumpers shall remain in a single tubular form, it follows, that under no circumstances may any of these pipes be filled in any manner or have additional smaller tubing inserted to the inside of the larger pipe. The single tubular pipe can have maximum of 4 mounting points.

# 6.2 **Internal bumpers**

- 6.2.1 Internal bumpers **Single tubing,** piping material used shall have a maximum outside diameter of 38mm and a maximum wall thickness of 2mm with a maximum of 4 mounting points.
- 6.2.2 The internal bumper shall be shaped in accordance with the vehicle's front silhouette;
- 6.2.3 Additional radiator protection may be installed internally with no more than 4 mounting points;
- 6.2.4 Vehicles that are manufactured with steel bumpers must be replaced with plastic or fibre glass bumpers, fitted with a single 38mm x 2mm pipe inside shaped according to the bumper;
- 6.2.5 Only plastic or fibre glass bumpers not exceeding 3mm thick may be fitted externally for cosmetic purposes only, no steel stiffeners;

6.2.6 No piping to protrude outside of bodywork;

# SC 7 STEERING AND SUSPENSION

- 7.1 Only standard and original components of manufacturer shall be permitted;
- 7.2 Strut tower tops and control arms may be slotted with tolerance of 25mm (not both) for the purpose of (CC&A) camber/castor/alignment adjustments only, NO extended or shortened control arms; The use of camber plates not permitted
- 7.3 Coils springs may be cut
- 7.4.1 Coils springs may be replace by standard production vehicles, Competition or drop coil kits is not permitted
- 7.4.2 **NO** spring adjustment allowed.
- 7.5 Shocks as per manufacture specification that is freely available over the counter eg., Armstrong, Monroe, Gabriel is permitted, No competition shocks
- 7.7 Clip-on steering wheel (no homemade clip-on device)

## SC 8 EXHAUSTS:

- 8.1.1 Exhausts and silencer boxes mandatory and must comply to prescribed noise levels; Maximum decibels 108, measured 1metre away at 5000rpm;
- 8.1.2 Branches is permitted

## **Exhaust Fitment**

- 8.2.1 Exhaust outlet must face downwards underneath the vehicle;
- 8.2.2 All piping shall be secured with saddles, preventing exhaust pipes from coming free in the event of it breaking off;
- 8.2.3 Exhausts fitted below the floor pan shall have saddles fitted at +- 33% and 66% of the exhaust length to retain the exhaust in the event of exhaust breaking.
- 8.2.4 Saddles are to be bolt on type;
- 8.2.5 Exhaust systems installed above the floor pan with tailpipes passing out through the side of the vehicle, shall do so at a maximum height of 450mm measured from the ground to the top of the pipe with the vehicle parked on a level floor, with driver seated and tyres measured at racing pressures;
- 8.2.6 Exhaust systems installed above the floor pan may not protrude more than 50mm beyond the body silhouette;
- 8.2.7 A suitable metal plate mounted away from the exhaust in order that it acts, as an effective heat shield shall cover the pipe inside the driver's compartment.

## SC 9 FLYWHEELS

- 9.1 Flywheel to keep to standard specification, no lightening of flywheel
- 9.2 Any 6 hole or 9 hole flywheels allowed for Vw engins.

# SC 10 FUEL

10.1 Only normal service station pump fuel 95 octane and lower is permitted

## SC 11 FUEL MANAGEMENT AND CARBURETION:

- 11.1 No modifications to the fuel system will be permitted.
- 11.2 **NO** Fuel injection systems allowed.
- Only the original Volkswagen KEIHIN downdraught single (one) twin Choke 30 mm and 26 mm carburetor to be used on all 1600 Saloon vehicles.

Futher by restrictor plate, 20mm and 24 mm supplied by Do4sa and fitted directly under base of the carburetor.

11.4 Adapter plate to accommodate carburator may not exceed 20 mm and may not be tapered to form a

# venture and must be mounted directly on the intake manifold.

- 11.5 Jets sizes Open
- 11.6 Side draughts not permitted
- 11.8 No match porting on manifolds
- 11.9 Carburetors are to be kept standard no modifying to carburetors shall be permitted;
- 11.10 Electrical low pressure fuel pump permitted.
- 11.11 Any production electronic distributors is permitted; (VW distributor can be used on Datsun for example)
- 11.12 Two parallel springs on carburetor

## **ENGINE**

## SC 12 General

- 12.1 Any 8 valve single camshaft engine may be utilized up to 1600cc, fitted to the same body series.
- **12.2 NO** modifications permitted, internally or externally unless is specify in the rules;
- 12.3 Engine blocks may be re-bored to the recommended manufacturers' standard specification, plus max. **40** thou/ for wear reconditioning only using standard replacement pistons, (no high compression or performance pistons);
- 12.4 All machining to engine components shall be standard and normal reconditioning procedures;
- 12.5 Compression ratio are open
- 12.6 No modification to the fuel system will be permitted;
- 12.7 Air Cleaners and air boxes are open
- 12.8 Removal of alternators or charging system is permitted
- 12.9 Consumable items such as filter elements and spark plugs are open
- 12.10 No multi-valve cylinder head engines to be used. Only 2 valves per cylinder engines;
- 12.11 Only single overhead cam engines and OHV pushrod, 4 cylinder, 4 stroke engines permitted;
- 12.12 Camshafts is open
- 12.13 No changing of rocker ratios;
- 12.14 No engines with forced induction will be permitted e.g. turbo- or supercharged;
- 12.15 No machining or material removal from cylinder head ports/combustion chambers, valves, Crankshaft, conrods, pistons and flywheels, NO match porting; accept for head skimming
- 12.16 One conrod and one piston must be without any shaving and/or drilling and/or grinding/filing marks;
- 12.17 Spot machining of the crankshaft and flywheel are permitted for balancing purposes only;
- 12.18 Weight of engine components must be kept to standard specifications; no lightening will be permitted;
- 12.19 Vernier pulley permitted.
- 12.20 Pulleys and camshaft keyway may be slotted to allow for movement and offset keys and undersize keys are permitted.
- 12.21 Cylinder heads maybe grinded to accommodate the cam shaft. "lobes"
- 12.22 No motorcycle engines permitted;

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- 12.23 Only hydraulic lifters permitted
- 12.24 Vw cylinder heads may be grind to 131 mm.
- 12.25 Only the following heads will be permitted on Volkswagen engines:
  - : 026103373G- carb cyl head intake 38 mm exhaust 33 mm
  - : 1GS103373B- carb cyl head intake 38 mm exhaust 33 mm
  - : 17S103373 carb cyl head intake 38 mm exhaust 33 mm
  - : 6KS103373 MP9 cyl head- intake 38 mm exhaust 33 mm
  - : 1HS103373ABC-MP9 cyl head intake 39.5 mm exhaust 33 mm
  - : 2000cc heads are not permitted
  - : 1800 cc and 2000cc crankshafts are not permitted
  - : 2000cc block with dech height of 236 mm are not permitted

MP9 heads to use adapter plate maximum of 4 mm thick



- 12.26 Any 17S, A block and 1.8 block with deck height of 220 mm may be utilized..
- 12.27 Any lubricant is permitted.

# SC 13 TRANSMISSION

- 13.1 Only original gearboxes as fitted to the specific model in standard form may be used;
- 13.2 Rear axles/final drives must be the original standard unit;
- 13.3 Ratio of final drives is open
- 13.4 The differential may be locked by means of welding the gears together e.g. locked diffs;
- 13.5 No limited slip diffs will be permitted;
- 13.6 Standard clutches only;
- 13.7 must remain standard;
- 13.8 links can be changed but al gears must be selectable in car.

# SC 14 WHEELS AND TYRES

14.1 Double wheels not permitted

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- 14.2 Any 13" 15" rims may be used with a maximum width of 7J from 1 June 2025;
- 14.4 13"- 15" tyres with a width 185 from 1 June 2025
- 14.5 Only freely available road tyres from any general tyre dealer is allowed;
- 14.6 Normal road legal tyres, new or re-treaded are permitted; slick or semi slick tyres will not be permitted;
- 14.7 No purpose built or manufactured race tyres are permitted; Rally tyres not permitted
- 14.8 Grooving of tyres permitted.
- 14.9 Tyre walling bearing the following inscription is not permitted, "for racing purposes only/ not road legal / not for highway use";
- 14.10 All tyres have to be presented at scrutineering;
- 14.11 Only 20mm wheel spacers is allowed (as long as wheels doesn't pass body)
- 14.12 Wheel/Rim Protectors permitted Maximum 6mm wall thickness.
- 14.13 No Bead locks allowed.

# SC 15 WINGS:

15.1 Wings are not permitted;

# 1660'S - MODIFIED SALOON CLASS (FC)

## FC1. ELIGIBILITY OF VEHICLES AND BODIES

- 1.1 Any saloon car body is permitted;
- 1.2 Any saloon body replicas may be constructed as a space frame with a panel being in solid-form (patchwork pieces making up a panel will not be permitted)
- 1.3 The body utilized shall have been powered by a three or four-cylinder piston driven engine;
- 1.4 Front-Wheel-Drive (FWD) and Rear-Wheel-Drive (RWD), tintops, semi space frames and space frames permitted for Nationals 2023, Club and Regionals for 2024 and only Fwd tintop and Fwd space frames from January 2025.
- 1.5 The use of an engine originating from another make and/or model shall also be permitted, e.g. (Nissan in a Ford Escort body) provided that such engine complies with FC6;
- 1.6 No age restriction to model of vehicle being utilized;

## FC2. BUMPERS

- 2.1 No external steel bumpers permitted, refer to internal bumper regulation;
- 2.2 For Internal Bumper Regulations refer to CR6;
- 2.3 Only plastic or fibreglass bumpers not exceeding 3mm thick may be fitted externally for cosmetic purposes only;
- 2.4 No piping to protrude outside of bodywork;

## FC3. BRAKES

- 3.1 Brakes are free;
- 3.2 See CR5.

## FC4. CAR CONSTRUCTION

- 4.1 Four-Wheel-Drive (4WD) vehicles not permitted;
- 4.2 Construction must conform to Do4sa construction regulations.

#### FC5. DIMENSIONS AND WEIGHTS

- 5.1 All four wheels of the vehicle must fit within the body of the vehicle
- 5.2 Maximum vehicle length permitted is 5000mm (5m);
- 5.3 Maximum vehicle width permitted is 2000mm. (2m);
- 5.4 Weight Saloon vehicles and LDV's may be weighed anytime and must comply to a minimum weight of 800kg including driver.

#### FC6. ENGINE SPECIFICATIONS

- 6.1 Engines utilized will only be permitted if more than 500 units of the donor-vehicle were sold in South Africa and if more than 5000 units were sold world-wide;
- 6.2 The use of the Nissan A15 engine is specifically permitted, subject to all other limitations;
- 6.3 The use of an engine originating from another model, manufactured by the same manufacturer or the use of an engine from another manufacturer shall be permitted, provided that that engine complies with the

criteria as set out above, e.g. (Nissan 1200 can be replaced with a Nissan 1500 or a Nissan engine may be replaced with a Ford engine);

- 6.4 The engine shall have no more than 4 cylinders;
- 6.5 1450CC 16Valve permitted in standard-form no tolerance; Standard Throttle Body Only;
- 6.6 1550cc 12 valve permitted in standard form no tolerance;
- 6.7 1660cc 8 valve permitted PLUS 2cc tolerance;
- 6.8 Engines may be solid mounted;
- 6.9 Only the original intake manifold and induction system may be used on 12v and 16v engines;
- 6.10 Throttle bodies are not permitted;
- 6.11 Air cleaners are free;
- 6.12 See CR8.2, 8.3 and 8.4 for engine placement and offset;
- 6.13 Removal of alternators or charging systems is permitted;
- 6.14 Aftermarket pistons and "conrods" permitted in 8v engines, for example; Arias pistons, Eagle Rods, etc.

# FC7. EXHAUST SYSTEMS

- 7.1 Branches are permitted;
- 7.2 Exhausts and silencer boxes are mandatory;
- 7.3 Maximum decibels = 103Db.

## 7.4 As per CR 9

## FC8. FUEL, FUEL MANAGEMENT AND CARBURETTORS

- 8.1 Methanol, Avgas, Racing-Fuel and Pump-Fuel are permitted;
- 8.2 No performance-enhancing additives permitted;
- 8.3 Methanol lubricant, such as Castrol R40 or castor oil, may be used;
- 8.4 Maximum of 2 x 40mm Side-Draft or Down-Draft Carburetors;
- 8.5 Choke tubes shall not exceed 34mm when measured at any point across diameter with a 0.2 mm tolerance;
- 8.6 After market fuel management systems permitted;
- 8.7 12v and 16v engines may only use pump fuel (ULP / LRP).
- 8.8 Fuel injection is permitted.
- 8.9 Intake manifolds from a different model may be used as long as it is from the same manufacturer.
- 8.10 No modifications will be allowed on or inside the manifold and plenum chamber.
- 8.11 Maximum 60mm single throttle body.

## FC9. STEERING AND SUSPENSION

- 9.1 Steering-Racks and Steering-Boxes, or quick ratio versions thereof, power steering from production vehicles are all permitted;
- 9.2 Rose-joints are permitted;
- 9.3 Spring adjustments are permitted;
- 9.4 Only freely available, "over-the-counter", shock absorbers shall be permitted. It follows that no competition shocks will be allowed only standard shocks;
- 9.5 Gas shocks permitted within this range;
- 9.6 Coil over kits permitted eg jom, blueline, maxtraxx etc;
- 9.7 Wheel spacers only 25 mm maximum allowed.

## FC10. TRANSMISSION

10.1Differentials utilized will only be permitted if more than 500 units were sold, of the vehicle from which it originated, within South Africa;

- 10.2Only standard differentials and gearboxes are permitted although the *ratio* itself may be interchanged between standard differentials and gearboxes;
- 10.3 Differentials may be locked;
- 10.4 Limited-slip differentials are not allowed;
- 10.5 Clutches are mandatory and open.

## FC11. WHEELS AND TYRES

- 11.1 Normal, road-legal tyres (new or re-treaded) permitted;
- 11.2 Tyres must be freely available from any general tyre dealer;
- 11.3 Tyres may not bare the inscription "not for highway use, for racing purposes only";
- 11.4 See CR26.
- 11.5 Tyres & Rims: 13, 14 or 15 inch with a maximum width of 195 are permitted.

# FC13. GENERAL

SPECIFICALLY DISALLOWED:		
Aftermarket Roller-Rockers		
Altered Rocker Ratios		
Competition/performance Crankshaft		
Dry sump		
Forced induction (turbo - supercharger)		
Throttle bodies		
Limited slip diff.		
Station-Wagons / Panel vans		

# 2100CC MODIFIED SALOONS (MS)

#### MS1. ELIGIBILITY OF VEHICLES AND BODIES

- 1.1 Any saloon car body is permitted;
- 1.2 Any saloon body replicas may be constructed as a space frame with a panel being in solid-form (patchwork pieces making up a panel will not be permitted);
- 1.3 Rear-Wheel-Drive (RWD) and Front wheel Drive(Fwd) Tintop, Semi and Space frames permitted for Nationals 2023, for Club and Regionals in 2024 and only Rear wheel Drive(Rwd) from January 2025;
- 1.4 The use of an engine originating from another make and/or model shall also be permitted, e.g. (Nissan in a Ford Escort body) provided that such engine complies with MS6;
- 1.5 No age restriction to model of vehicle being utilized;

# MS2. BUMPERS

- 2.1 No external steel bumpers permitted, refer to internal bumper regulation;
- 2.2 For Internal Bumper Regulations refer to CR6;
- 2.3 Only plastic or fibreglass bumpers not exceeding 4mm thick may be fitted externally for cosmetic purposes only;
- 2.4 No piping to protrude outside of bodywork;

## MS3. BRAKES

- 3.1 Brakes are free (number of "Pots", etc);
- 3.2 See CR5;

## MS4. CAR CONSTRUCTION

- 4.1 Front-Wheel-Drive cars may be converted to Rear-Wheel-Drive cars and vice versa;
- 4.2 Competitors who wish to convert FWD to RWD shall contact the DO4SA TC's for inspection and upon their approval the change will be noted in the scrutineering book;
- 4.3 Four-Wheel-Drive (4WD) vehicles not permitted;
- 4.4 Construction must conform to Do4sa construction regulations.

#### MS5. DIMENSIONS AND WEIGHTS

- 5.1 All four wheels of the vehicle must fit within the body of the vehicle
- 5.2 Maximum vehicle length permitted is 5000mm (5m);
- 5.3 Maximum vehicle width permitted is 2000mm. (2m);
- 5.4 Weight Saloon vehicles and LDV's may be weighed anytime and must comply to a minimum weight of 800kg including driver.

## MS6. ENGINE SPECIFICATIONS

- 6.1 Engines utilized will only be permitted if more than 5000 units of the donor-vehicle were sold world-wide;
- 6.2 The use of an engine originating from another model, manufactured by the same manufacturer or the use of an engine from another manufacturer shall be permitted, provided that that engine complies with the criteria as set out above;
- 6.3 The engine shall have no more than 4 cylinders;
- 6.4 Engines may be solid mounted;

- 6.5 No Rotary engines;
- 6.6 Air cleaners are free;
- 6.7 See CR8.2, 8.3 and 8.4 for engine placement and offset;
- 6.8 Front wheel drive engines to remain in the original position;
- 6.9 Removal of alternators or charging systems is permitted;
- 6.10 No turbo- or super-chargers, or any form of forced induction is permitted;
- 6.11 Aftermarket pistons and "conrods" permitted for 8v 2100cc, for example; Arias pistons, Eagle Rods, etc.

## 6.12 8-Valves =

- i) Maximum volume of 2100cc (with 2cc tolerance);
- ii) See MS7 below for exhaust specs.
- iii) Dry sump allowed

## 6.13 16-Valves =

- i) Maximum volume of 2000cc (zero tolerance)
- ii) Nissan VVL OR Toyota Beams engines only.
- iii) Engines have to remain in standard-form (NO MODIFICATIONS).
- iv) See MS7 below for exhaust specs.

#### MS7. EXHAUST SYSTEMS

- 7.1 Branches are permitted on all engines;
- 7.2 Exhausts and silencer boxes are mandatory;
- 7.3 Maximum decibels = 103Db.

## 7.4 As per CR 9

## MS8. FUEL, FUEL MANAGEMENT AND CARBURETTORS

- 8.1 No performance-enhancing additives permitted;
- 8.2 Aftermarket fuel management systems permitted;
- 8.3 Aftermarket throttle-bodies allowed.
- 8.4 8-Valve's =
  - i) Maximum 45mm Throttle-Body per cylinder.
  - ii) Maximum of 48mm Side-Draft or Down-Draft Carburetors;
  - iii) Methanol, Avgas, Racing-Fuel and Pump-Fuel are permitted;
  - iv) Methanol lubricant, such as Castrol R40 or castor oil, may be used;
- 8.5 16-Valves (Beams and VVL) =
  - i) Maximum 70mm SINGLE Throttle-Body;
  - ii) Pump-Fuel Only

## MS9. STEERING AND SUSPENSION

- 9.1 Steering-Racks and Steering-Boxes are free;
- 9.2 Rose-joints are permitted;
- 9.3 Suspension: Suspension design is free with a maximum of 6-links on the rear;
- 9.4 Spring adjustments are permitted;
- 9.5 Single-adjustable competition-range shock-absorbers are allowed.
- 9.6 Coil over kits permitted;

## MS10. TRANSMISSION

10.1Differentials utilized will only be permitted if more than 5000 units were sold, of the vehicle from which it originated, world-wide;

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- 10.2 Only standard differentials and gearboxes are permitted;
- 10.3 Aftermarket ratios allowed, but must make use of syncro's in gearboxes (no "dog-boxes");
- 10.4 Differentials may be locked;
- 10.5 Limited-slip differentials are allowed;
- 10.6 Clutches are mandatory and open.

## MS11. WHEELS AND TYRES

- 11.6 Normal, road-legal tyres (new or re-treaded) permitted;
- 11.7 Tyres must be freely available from any general tyre dealer;
- 11.8 Tyres may not bare the inscription "not for highway use, for racing purposes only";
- 11.9 See CR26.
- 11.10 Tyres & Rims: 13, 14 or 15 inch with a maximum width of 205 are permitted.

## MS12. WINGS

- 12.1 Wings are permitted / optional;
- 12.2 Wings may not exceed the body width or exceed more than 100mm past the rear of the vehicle, center-point of horizontal vane and the tailgate);
- 12.3 Wing end plates to be a maximum of 500mm x 500mm;
- 12.4 Vertical plates permitted but shall not exceed 4 x vertical plates;
- 12.5 All aspects of the wing are to be contained within the dimensions of the end plates;
- 12.6 Height of wing should be no higher than 300mm from the highest point of the roof to the center-point of the horizontal-vane;
- 12.7 Wings to be mounted rearwards of the B-Pillar;
- 12.8 Only one level of horizontal blade allowed may have hinged-section on same level.

## MS13. GENERAL

SPECIFICALLY DISALLOWED:
Altered Rocker Ratios
Forced induction (turbo - supercharger)
Station-Wagons / Panel vans
In-car wing adjustment

# HOTRODS (HR)

## HR1. ELIGIBILITY OF VEHICLES AND BODIES

- 1.1 Any saloon body replicas may be constructed as a space frame with a panel being in solid-form (patchwork pieces making up a panel will not be permitted);
- 1.2 Rear-Wheel-Drive (RWD) and Front wheel Drive (Fwd) tintop and space frames permitted for Nationals 2023, Club and Regionals in 2024 and only Rear wheel Drive (Rwd) SPACE frames from January 2025;
- 1.3 The use of an engine originating from another make and/or model shall also be permitted, e.g. (Nissan in a Ford Fiesta replica body) provided that such engine complies with HR6;
- 1.4 Any modifications to enhance aerodynamics must form part of the mould.

## HR2. BUMPERS

- 2.1 No external steel bumpers permitted, refer to internal bumper regulation;
- 2.2 For Internal Bumper Regulations refer to CR6;
- 2.3 Only plastic or fibreglass bumpers not exceeding 4mm thick may be fitted externally for cosmetic purposes only;
- 2.4 No piping to protrude outside of bodywork;

## HR3. BRAKES

- 3.1 Brakes are free (number of "Pots", etc)
- 3.2 See CR5;

## HR4. CAR CONSTRUCTION

- 4.1 ONLY REAR WHEEL DRIVE SPACE FRAMES ALLOWED.
- 4.2 Four-Wheel-Drive (4WD) vehicles not permitted;
- 4.3 Construction must conform to Do4sa construction regulations.

## HR5. DIMENSIONS AND WEIGHTS

- 5.1 All four wheels of the vehicle must fit within the body of the vehicle
- 5.2 Maximum vehicle length permitted is 5000mm (5m);
- 5.3 Maximum vehicle width permitted is 2000mm. (2m);
- 5.4 Weight Saloon vehicles may be weighed anytime and must comply to a minimum weight of 800kg including driver.

## HR6. ENGINE SPECIFICATIONS

- 6.1 Engines utilized will only be permitted if more than 5000 units of the donor-vehicle were sold world-wide;
- 6.2 The use of an engine originating from another model, manufactured by the same manufacturer or the use of an engine from another manufacturer shall be permitted, provided that that engine complies with the criteria as set out above;
- 6.3 The engine shall have no more than 4 cylinders or twin-rotar (rotary engine);

- 6.4 No purpose-built engine-blocks or cylinder-heads, e.g. Mopar, Esslinger, etc. It follows that all blocks and heads were manufactured (or cast) by the original manufacturer for a road-going vehicle, and were then modified by an engine-builder for racing purposes.
- 6.5 Engines may be solid mounted;
- 6.6 Air cleaners are free;
- 6.7 See CR8.2, 8.3 and 8.4 for engine placement and offset;
- 6.8 Removal of alternators or charging systems is permitted;
- 6.9 Aftermarket pistons, "conrods" and cranks permitted, for example; Arias pistons, Eagle Rods, etc.
- 6.10 8-Valves =
  - i) Naturally aspirated: Maximum volume of 2750cc (2cc tolerance);
  - ii) Turbo-Charged: Maximum volume of 2000cc (2cc tolerance);
- 6.11 Multi-Valves =
  - i) Naturally aspirated: Maximum volume of 2450cc (2cc tolerance);
  - ii) Turbo-Charged: Maximum volume of 1600cc (2cc tolerance).
- 6.12 Rotaries =
  - i) Maximum of two rotars;
  - ii) Porting open
- 6.13 Flywheels are open;
- 6.14 Clutches are mandatory and open;
- 6.15 Dry sumps allowed

## HR7. EXHAUST SYSTEMS

- 7.1 Branches are permitted on all engines;
- 7.2 Exhausts and silencer boxes are mandatory;
- 7.3 Maximum decibels = 105Db (this may be subject local municipal laws).
- 7.4 As per CR 9.

## HR8. FUEL, FUEL MANAGEMENT AND CARBURETTORS

- 8.1 No performance-enhancing additives permitted;
- 8.2 Aftermarket fuel management systems permitted;
- 8.3 Aftermarket throttle-bodies allowed;
- 8.4 Fuel-management systems are open;
- 8.5 Carburetors and Injection are open.

## HR9. STEERING AND SUSPENSION

- 9.1 Steering-Racks and steering are open.
- 9.2 Suspension: Suspension design is free;
- 9.3 Double-adjustable competition-range shock-absorbers are allowed.
- 9.4 Coil over kits permitted;
- 9.5 Number of shocks is open.

## HR10. TRANSMISSION

- 10.1 Differentials are free and open;
- 10.2 Gearboxes are free and open, except for sequential / quick-shift / electronic which are NOT allowed.
- 10.3 Clutches are mandatory and open.

## HR11. WHEELS AND TYRES

- 11.1 Normal, road-legal tyres (new or re-treaded) permitted;
- 11.2 Tyres must be freely available from any general tyre dealer;
- 11.3 Tyres may not bare the inscription "not for highway use, for racing purposes only";
- 11.4 See CR26.
- 11.5 Tyres & Rims: 13, 14 or 15 inch with a maximum width of 205 are permitted.

## HR12. WINGS

- 1.1 Wings are permitted / optional;
- 1.2 Wings may not exceed the body width or exceed more than 100 mm past the rear of the vehicle, center-point of horizontal vane and the tailgate);
- 1.3 Wing end plates to be a maximum of 500mm x 500mm;
- 1.4 Vertical plates permitted unlimited quantity;
- 1.5 All aspects of the wing are to be contained within the dimensions of the end plates;
- 1.6 Height of wing should be no higher than 500mm from the highest point of the roof to the center-point of the highest horizontal-vane;
- 1.7 Wings to be mounted rearwards of the B-Pillar;
- 1.8 Multiple levels of horizontal blade allowed may have hinged sections.

## HR13. GENERAL

SPECIFICALLY DISALLOWED:
Forced induction (turbo - supercharger)
Station-Wagons / Panel vans / Bakkies
In-car wing adjustment

# HEAVY METAL CLASS (HM)

HM 1	Eligibility of vehicle and bodies:				
1.1	Any car- or LDV (Bakkie) body will be permitted.				
1.2	Any six or eight cylinder car <b>body</b> . commercially sold. will be permitted.				
1.3	Only original road going vehicles will be allowed. This means no space				
	frame or semi-space frame vehicles.				
1.4	Body and engine can be from different manufacturers.				
1.5	Only front fenders. doors. boot lids and bonnets may be replaced with fibre				
	glass panels.				
1.6	The boot panel between rear lights must remain.				
1.7	The firewall may be cut to accommodate the engine,1.2mm plate replacement, welded in .				
HM 2	Safety:				
2.1	NON contact racing.				
2.2	Ensure that all joints in construction are welded properly;				
2.3	Sump. gearbox and differential plugs are to be wired securely;				
2.4	No in car adjustments permitted. with the exception of brake balancing;				
2.5	Interior mirrors allowed				
HM 3	Bumpers:				
3.1	Only internal bumpers permitted. See Cr 6				
3.2	Only plastic or fibre glass bumpers must be fitted externally (fibre				
	glass bumpers not exceeding 4mm in thickness				
	Sill protectors are permitted with maximum height of 300 mm from the ground.				
3.4	No nerve bars are permitted.				
HM 4	Brakes and brake lights:				
4.1	Only factory fitted brake system permitted. Also see CR 5				
4.2	No ABS or any other electronic driving aids is permitted;				
4.3	Paddle box and master cylinder free.				
HM 5	Car construction:				
5.1	Front- and rear wheel drive cars are permitted.				
5.2	Front wheel drive cars may not be converted to rear wheel drive cars or vice versa.				
5.3	Four wheel drive vehicles are not permitted.				
5.4	Construction must conform to DO4SA Construction Regulations.				
5.5	Vehicles may be lefthand or righthand drive.				
5.6	No cutting on car construction except for boot floor and back seat rest.				

# HM 6 <u>Dimension and weights</u>:

- 6.1 All four wheels of the vehicle must fit within the body of the vehicle.
- The minimum weight shall be 1050 kg including driver.
  - $6.3 \quad \text{Wheel base: The original manufacturer's specifications to be used with a tolerance of 50mm per side} \; .$

Engine:

#### **HM 7** 7.1 Only five and six cylinder piston driven engines will be permitted, no v8 engines 7.2 Engine power restricted to 220 KW on the fly wheel 7.3 No engines with forced induction will be permitted e.g. turbo- or supercharged; 7.4 Only standard. factory fitted rockers and lifters may be used; 7.5 Standard bore plus 60 thou oversize permitted 7.6 Engine compression may be increased - skimming of head and block allowed; 7.7 The stroke may be changed; Only commercially sold pistons are allowed. (020. 040. 060)(No 7.8 aftermarket racing pistons allowed). 7.9 See CR 8.4 The rear face shall not be more than 600mm rearwards from a line drawn through center of the two front wheels. 7.10 Air Cleaners and air boxes are open 7.11 Removal of alternators or charging system is permitted 7.12 Consumable items such as filter elements and spark plugs are open 7.13 Spot machining of the crankshaft and flywheel are permitted for balancing purposes only; 7.14 Weight of engine components must be kept to standard specifications; no lightening will be permitted; 7.15 No motorcycle engines permitted; permitted. 7.16 Any lubricant is allowed. 7.17 Fuel injection is allowed. 7.18 An aftermarket ECU is permitted. 7.19 Cams are free. **HM 8 Exhausts:** 8.1 Banana Branches are allowed and exhausts must comply with the noise level prescribed. See Cr 9 **HM 9** Fuel. Fuel management and carburetion: 9.1 Racing (afgas 102)- Ethanol and pump fuel permitted. 9.2 Methanol, performance-enhancing additives is not permitted; HM 10 **Suspension:** 10.1 Shocks can be interchanged as long as it is a shock that was originally fitted to a commercially sold vehicle. The original mounting points on Shock, body and suspension to stay the same. 10.2 Only vehicle specific suspension components may be used (e.g. BMW 535 suspension parts cannot be fitted to a BMW 740 or a Ford Sierra) 10.3 The lowering of the car will be permitted. Ride-height adjustment is free. 10.4 Coil springs is free and the use of Camber plates are not permitted. 10.5 Steering box and racks may be inter-changed. 10.6 Control arms may be altered, but not adjustable. 10.7 Control arms must be mounted on original chassis position. 10.8 JOM Coilovers permitted (Red Line/Blue line/ ARC) 10.9 Sleeve over permitted The lower front control arms may be 50 mm longer than factory specifications per side. 10.10

# **HM 11 Transmission:** Only commercially sold transmissions will be permitted. 11.1 Differentials may be locked. but no limited slip differentials will be allowed. 11.2 Diff ratios may be altered. Centre portion of independent differentials and 11.3 mounting there-of is free 11.4 Button Clutch will be permitted. Flywheel and pressure plate are free, Lightened flywheels will be permitted. 11.5 HM 12 **Wheels and Tyres:** 12.1 Normal. road legal tyres. new. second hand or re-tread are permitted; 12.2 Tyres must be freely available from any tyre dealer; 12.3 Tyres may not bare the inscription "not for highway use. for racing purpose only". 12.4 Under no circumstances may any names or sizes be buffed off from the tyre walls. 12.5 Groofing of tyres are Permitted. 12.6 Rally tyres are not permitted. 12.7 Tyres will be a maximum of 15 or 16 inch (8J) with a maximum width of 195 as indicated on the tyre wall. 12.7 All four wheels of the vehicle to fit within the body of the vehicle. Wheel spacers permitted maximum 25 mm. 12.8 Wings: **HM 13** 13.1 Wings are permitted BUT NO under floor DIFFUSER. 13.2 Wings may not exceed the body width or protrude beyond the rear of the vehicle center-point of horizontal vane and the tailgate); 13.3 Wing end plates to be a maximum of 500mm x 500mm; 13.4 Vertical plates permitted but shall not exceed 4 x vertical plates; 13.5 All aspects of the wing are to be contained within the dimensions of the end plates; 13.6 Height of wing should be no higher than 300mm from the highest point of the roof to the center-point of the horizontal-vane; 13.7 Wings to be mounted rearwards of the B-Pillar but end plates may not be attached to the roof or C pillar; 13.9 Only one level of horizontal blade allowed - may have hinged-section on same **HM 14** level. Spoiler 14.1 Rear spoilers only- must be securely attached to top of rear body along entire width. 14.2 No material height adjustable type spoilers allowed. 14.3 Spoiler may be hinged to rear body to allow for change in angle of deflection. 14.4 No more than three (3) spoiler supports may be used. 14.5 Spoilers may be made of sheet aluminium or a transport material, such as Lexan, and of adequate strength. 14.6 Open motor spoiler may have a maximum size of 200mm height.

14.7 Note: gurney Flaps or curls are allowed along the upper edge of the spoiler,

but their length will be included in all measurements;

# MIDGET CLASS (MC)

### MC1. BRAKES

- 1.1 **No** ABS or any other electronic driving aids permitted;
- 1.2 See CR5.

#### MC2. CAR CONSTRUCTION

### 2.1 Roll Cage

- i) There will be a minimum clearance of 50mm between the driver's helmet and any part of the rollcage;
- ii) Pipe of minimum 30mm in diameter with a wall thickness of 2mm is used for construction of the rollcage and chassis;
- iii) The roll cage must enclose the driver with a minimum of 4 down pipes and 2 cross braces;
- iv) The use of chrome-molly tubing is permitted.

### 2.2 Nerf Bars

- i) Nerf bars must be fitted to both sides of the vehicle;
- ii) Nerf bars must be securely bolted;
- iii) Must be designed to protect the full width of the rear tyre of the vehicle;
- iv) The Nerf bars may not protrude more than 50mm beyond the rear wheel of the vehicle;

#### 2.3 Bumpers

- i) Front bumpers:
  - a) are compulsory and must be constructed of pipe with a maximum measurement of 30mm x 2mm;
  - b) may not protrude beyond the width of the chassis at the front, neither may they protrude more than 150mm beyond a line drawn immediately in front of the 2 front tyres a tolerance of 50mm shall be allowed:
- ii) Rear bumpers (or *Push Bars*):
  - a) Shall have a maximum diameter of 30mm x 2mm;
  - b) The mid-bumper or push-bar height shall be between 250mm and 400mm above the ground;
  - c) shall be designed that they do not protrude more than 100mm from the nearest body component;
  - d) mounting points may not exceed the width of the chassis at the rear;
  - e) vertical element of the bumper shall mount to a solid point on the vehicle or the other vertical elements;
  - f) The nose-cone and tail-piece to be constructed to all safety measures;

# MC3. ENGINE SPECIFICATIONS

- 3.1 Only Nissan VVL or Toyota Beams 2000cc 16 valve engines allowed;
- 3.2 Auto Digest with 2cc tolerance allowed;
- 3.3 Engines may be solid mounted;
- 3.4 Maximum tilt angle of 15°;
- 3.5 Only Gotech, Dictator and Spitronics management systems allowed;
- 3.6 Air cleaners are free:
- 3.7 Standard fuel injection intake (Nissan VVL throttle may be turned, cut and adjusted to fit into the frame);
- 3.8 Maximum Throttle body size is 70mm;
- 3.9 Alternators must be fitted;
- 3.10 No Turbo-charged, Super-charged or any forced induction allowed;
- 3.11 Only standard wet sumps (may cut to fit frame), but no dry sump systems;
- 3.12 Starter and flywheel / flex-plate must be fitted;
- 3.13 Engine must be dyno-tuned at start of season, and dyno-sheet must be handed in at first club event of new season;

3.14 Competitor may be asked by stewards for a dyno-run at any given time during the season to match first dyno-run.

### MC4. EXHAUST SYSTEMS

- 4.1 All piping shall be secured with saddles, preventing exhaust pipes from coming loose in the event of it breaking off;
- 4.2 Exhaust are open and the tail pipes are permitted to pass through the back of the vehicle or to have a turn 90 degrees before rear wheel;
- 4.3 Maximum decibels 103.

# MC5. FUEL, FUEL MANAGEMENT AND CARBURETTORS

- 5.1 No fuel additives;
- 5.2 Unleaded Pump fuel only.

# MC6. STEERING AND SUSPENSION

- 6.1 Only solid axles permitted;
- 6.2 Independent suspensions are prohibited;
- 6.3 Front axle shall be a solid-axle type, no wishbone system shall be permitted;
- 6.4 Steering mechanism shall be free, with the exception of, motorbike handle bars will not be permitted;

### MC7. TRANSMISSION

- 7.1 Only live axle differentials permitted;
- 7.2 Gearboxes are open;
- 7.3 Torque tube permitted;
- 7.4 Quick change diffs permitted;
- 7.5 Torque arms permitted;

### MC8. WHEELS AND TYRES

- 8.1 225 x 10" x 13" to front only permitted;
- 8.2 Hoosier or American Racers or a combination of both is permitted.
- 8.3 Rear Tyres & Rims: 13, 14 or 15 inch with a maximum width of 205 are permitted for Nationals

### MC9. WINGS

9.1 Wings may not be wider than the rear track width and/or maximum of  $1700 \text{mm} \times 750 \text{mm}$  or  $1.3 \text{m}^2$ .

# MC10. NOSE-WINGS

- 10.1 Nose wings shall not exceed 610mm x 610mm;
- 10.2 Nose wing end plates shall be a maximum of 610mm x 300mm (height).

# AMERICAN SALOONS (V8'S) (AMS)

### AMS1. ELEGIBILITY OF VEHICLES AND BODIES

- 1.2 Rear-wheel drive vehicles only;
- 1.3 Flexi's need to be recognizable as a car.
- 1.4 Wedge-shaped cars may retain their entry through the roof.
- 1.5 vehicles shall be constructed of materials as follows:
  - i) Steel max 1mm thick;
  - ii) Aluminium max 1.6mm thick;
  - iii) Fibreglass / Composite Material max 6mm thick.
- 1.6 Chassis construction: 38mm x 38mm x2mm square tubing or 38mm x 2mm round tubing.
- 1.7 The balance of construction: the material used shall not exceed the following sizes: 50mm x 50mm x 2mm square tubing or 50mm x 2mm round tubing.

### AMS2. SAFETY

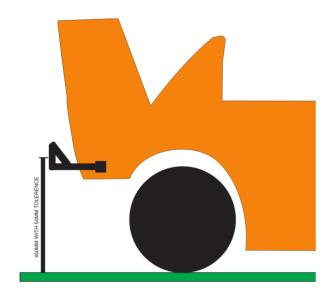
- 2.1 Cars must be safe according to the judgement of the scrutineer and/or TC, who must specifically take notice of side-impact protection, safety should the car roll-over and the cockpit area above and below the driver. Should any of these areas indicate a possible safety-issue, the scrutineer shall summon the TC who shall not pass a vehicle which could possibly endanger the well-being of the competitor, other competitors, officials or spectators.
- 2.2 See CR's for basic safety guidelines.

### AMS3. BUMPERS / SISSY-BARS

### 3.1 REAR BUMPERS

- i) max of 6 mounting points, inclusive of the mounting to the internal pipe;
- ii) max of 2 horizontal pipes, and 4 uprights. Two (2) of the uprights shall be placed in the corners of the bumper. The other 2 uprights shall be positioned at the center-point from the corner and the center of the vehicle on both sides;
- iii) may not extend forward past the center of the rear wheels, and must be rounded back to the internal mounting pipe via a bolt-on-flange or welded arrangement where it enters the body either the upper or the lower pipe shall remain horizontal when viewed in side elevation;
- iv) Bumper must be 450mm above ground level to the centre of the two horizontal pipes with a 50 mm tolarance;
- v) The 2 horizontal pipes must be 200mm apart;
- vi) Max size of pipe used to be 38mm x 2mm.





# 3.2 FRONT BUMPERS

- i) No external;
- ii) Internal bumper refer to CR 6.1 and CR 6.2

# 3.3 SISSY BARS

- i) Pipe size 38mm x 2mm;
- ii) 500mm off the ground level;
- iii) Shall have 3 vertical supports bolted or welded.

# AMS4. BRAKES

- 4.1 Brakes are free (number of "Pots", etc); SEE CR5
- 4.2 Brake bias (balancing) permitted;

### AMS5. WEIGHTS

- 5.1 The vehicle may be weighed at any time and must comply to the prescribed minimum weights which includes the competitor:
  - i) 6 Cylinders and "Lexus" 950kg
  - ii) V8'S 1050kg.

# AMS6. ENGINE

- 6.1 Removal of alternators is permitted;
- 6.2 Only 6-Cylinder and 8-Cylinder engines permitted;
- 6.3 All modifications to the engine are allowed (not including forced induction of any nature).
- 6.4 Flywheels are open;
- 6.5 Clutches are open;
- 6.6 Mid-mounted engines are not permitted;
- 6.7 Engines may not be mounted rearwards of the 1100mm from the centre of the front wheel to the back face of the engine;
- 6.8 No part of the engine may be rearward of the center (midpoint) of the wheel-base.

### AMS7. IGNITION SYSTEMS

7.1 Aftermarket ignition systems are permitted;

### AMS8. EXHAUST SYSTEMS

- 8.1 Branches / Manifolds are open;
- 8.2 See CR 9.1 and CR 9.2
- 8.3 See CR 9.3 and CR 9.4
- 8.4 Exhaust outlets must face downwards when underneath the vehicle.

# AMS9. FUEL, FUEL MANAGEMENT AND CARBURETTORS

- 9.1 No performance-enhancing additives permitted;
- 9.2 Methanol, Avgas, racing and pump fuel allowed;
- 9.3 Only methanol lubricants may be used such as Castrol R40 or castor oil.
- 9.4 Fuel-Injection is permitted;
- 9.5 Carburetors are open;

#### AMS10. STEERING AND SUSPENSION

- 10.1 Rose-joints are permitted;
- 10.2 Steering rack is free;
- 10.3 Maximum of six (6) links on rear suspension;
- 10.4 Spring adjustment is permitted;
- 10.5 Any shock-absorber is permitted;
- 10.6 No limit on number of shock-absorbers per car.

### AMS11. TRANSMISSIONS

### 11.1 DIFFERENTIALS:

- i) "Quick-Change" diffs allowed;
- ii) Limited slip differentials permitted;

### 11.2 GEARBOXES:

i) Gearbox, gear-ratios and gear-sets are free;

#### AMS12. WHEELS AND TYRES

- 12.1 Rally tyres are not permitted;
- 12.2 Any freely available tyre at a general tyre dealer permitted;
- 12.3 Maximum road legal tyre size 205mm, rim size up to 15, 16, 17";
- 12.4 All four wheels of the vehicle must fit within the body of the vehicle

# AMS13. WINGS

- 13.1 Endplates: maximum size of 500mm width;
- 13.2 Endplates may not be attached to the roof or pillars C pillars and must have a minimum of 100mm between the C pillar and the wing, looking from a side elevation;
- 13.3 Wing-height: 300mm above highest point of roof;
- 13.4 Wings are not allowed to be wider than the width of the vehicle or protrude beyond the rear of the vehicle, excluding bumper;
- 13.5 The horizontal vane cannot exceed 500 mm in width.
- 13.6 Spoiler
- 13.7 Rear spoilers only- must be securely attached to top of rear body along entire width and may not protrude beyond the rear of the vehicle, excluding bumper.
- 13.8 No material height adjustable type spoilers allowed. Spoiler may be hinged to rear body to allow for change in angle of deflection.
- 13.9 No more than three (3) spoiler supports may be used.
- 13.10 Spoilers may be made of sheet aluminium or a transport material, such as Lexan, and of adequate strength.
- 13.11 Open motor spoiler may have a maximum size of 200mm height.
- 13.12 Note: gurney Flaps or curls are allowed along the upper edge of the spoiler, but their length will be included in all measurements;

# LATE MODELS (LM)

#### LM1. BODY

- 1.1 Standard Dirt Style body required. A stock appearing Monte Carlo/Grand Prix/Taurus etc. Style nose is required. NOTE: Nose and rear roof supports must match body style. For roof size and roof support size.
- 1.2 All cars must have type of car displayed on body, with 3" minimum letters.
- 1.3 No wedge style bodies, no roof mounted spoilers or wings.
- 1.4 No lips allowed anywhere on the nose or body.
- 1.5 All cars must have a minimum of 1-1/2" roll at the top of the fenders, doors and quarter panels, a sharp edge will not be allowed. Body roll must go from sides over upper body, not upper body over sides. A single strip affixed to the edge and pop-riveted will not be allowed.
- 1.6 No part of deck lid may extend beyond quarter panels at rear.
- 1.7 All cars must have a number at least 18" high, clearly visible and identifiable on both sides and on roof. All cars must have numbers at least 3" high on nosepiece in the approximate position of the headlight, and at the rear on the fuel cell, at least 6" high, in a visible position. This rule is for the benefit of all competitors who wish their car to be scored correctly on each lap. In the event of more than one car with the same number, where confusion may occur, a team may be asked to alter their number in some way to avoid any misunderstanding. The first car to sign in will take precedence in retaining its original number.

#### LM 2 INTERIORS:

- 2.1 The interior bodywork of the car may be dropped to a maximum of 3" below the top of the doors, and must also be a minimum of 11" inches below the roll cage.
- 2.2 If a dropped interior is used, the interior panel must fasten flush at the top of the doors, and must taper gradually towards center of car, without creating any lips. The minimum taper allowed will be 8".
- 2.3 If a dropped interior is used, it must taper up, in a straight line, to the quarter-panel height and be flat and level for a minimum of 32" to the end of the rear deck-lid / quarter-panel / spoiler.
- 2.4 If interior is flat throughout the car, it must maintain a minimum clearance of 11" from the roll cage, to allow for easy exit.
- 2.5 If interior is flat, the panel must run in a straight line from immediately behind the driver's seat to the base of the spoiler / rear of deck lid.

# LM 3 NOSE PIECE:

Nose extensions must be flexible, and must not extend outside front tyres with wheels pointing straight ahead. They cannot alter original shape of nosepiece, and must be braced with collapsible supports, No steel supports. A stock appearing nose must be used; it must be made of moulded type material and must be mounded level. No material may be removed from, or added to nosepiece, no cutting from bottom, top or sides. Fender flares must not alter original shape of nosepiece.

These are the minimum vertical measurements from the bottom of the nosepiece, where sheet metal is attached. Two- Piece nose must be fastened together without any spacers to increase width.

Tow hooks are mandatory, whatever style of nosepiece is used.

### LM 4 FRONT FENDERS AND HOOD:

- 4.1 Must be level and flat from left side of car and, at least, as far back as firewall / engine plate.
- 4.2 No part of fenders or hood may be below outside bodyline.
- 4.3 Fenders may not gain height from rear to front of car.

### LM 5 DOORS:

- 5.1 Top of doors, on both sides, can be no higher than 36" from ground, with a maximum material depth of 32"inches including any skirts or body extensions.
- 5.2 At no point may doors break in towards center of car.
- 5.3 No dishing.

### LM 6 ROOFS- MANDATORY:

- 6.1 All models regardless of brand will have the following roof dimensions. Minimum- 48" wide X 46" in length. Maximum- 50" wide X 51" in length.
- 6.2 Roof post / supports are mandatory.
- 6.3 All posts must go from roof edge to outside edge of body on both sides.
- 6.4 Rear roof post must be flat, not curved.
- 6.5 Roof supports dimensions.
- 6.6 40" minimum to 43" maximum across the bottom. The roof supports must be aligned from side to side on all cars. The roof support windows must be cut out, same size on both sides. Holes may be filled with lexan. (No window decal's)
- 6.7 Front post must be flat and of uniform width from top to bottom 2" minimum, with a maximum 1-inch break at top and bottom.
- 6.8 No flat or odd shaped roofs.
- 6.9 A maximum 1" roll is allowed along the front edge of the roof, a maximum 1" roll is allowed along the rear edge.
- 6.10 Any sun / anti-glare shields (maximum 4") deep must be hinged for easy exiting.

### LM 7 REAR QUARTER PANELS:

- 7.1 No offset quarter-panels except taper from both sides towards center of car.
- 7.2 Tyre clearance from doors and quarter-panels must be a minimum of 2" tyre must be fully visible from the side no wheel skirts.
- 7.3 At no point may quarter-panels break in towards center of car. No dishing.

# LM 8 SPOILER:

- 8.1 Rear spoilers only- must be securely attached to top of rear body along entire width.
- 8.2 No material height adjustable type spoilers allowed. Spoiler may be hinged to rear body to allow for change in angle of deflection.
- 8.3 No more than three (3) spoiler supports may be used.
- 8.4 Spoilers may be made of sheet aluminium or a transport material, such as Lexan, and of adequate strength.
- 8.5 Open motor spoiler may have a maximum size of 8" height, by 72" width.
- 8.6 Crate motor spoilers may have a maximum of 12" height, by 72" width.
- 8.7 Note: gurney Flaps or curls are allowed along the upper edge of the spoiler, but their length will be included in all measurements; Spoilers will be measured according to total length of band width of material, in any shape.

# LM 9 CHASSIS / FRAME:

- 9.1 No aluminium frames or front clips. All frames must be of steel construction, and must be as minimum of 2" by 2" square, or rectangular, with a minimum material thickness of 083".
- 9.2 If round tube frame, tubing must have a minimum of 1-3/4" outside diameter, with a minimum material thickness of 083". These frames must use 4130 chrome molly steel for construction.
- 9.3 No front bumpers allowed. Rear bumpers allowed, may be re-in forced, but no rear extensions except for push bar. Push bar must not extend more than 6" beyond rear quarter panels, and must have welded supports to frame at each end. In any case, bumper may not extend beyond center of rear tyre.

- 9.4 Wheelbase a minimum of 103" inches.
- 9.5 No wings or tunnels of any kind allowed underneath the body or chassis of the car.

### LM 10 ROLL CAGE:

- 10.1 All cars must have a suitable steel roll cage protecting the driver's compartment, including headrest.
- 10.2 Side roll bars are mandatory, and must extend into the door panels.
- 10.3 A minimum of three (3) bars must be used on the left side.
- 10.4 Each bar must be at least 1- half" in diameter, with a minimum material thickness of 083".
- 10.5 Roll cages must be welded to frame.

### LM 11 DRIVER COMPARTMENT / SAFETY:

- 11.1A full metal firewall must encompass the driver's compartment front, rear, sides and floorboard.
- 11.2 Driver's seat must be of a proper racing seat design, located on left side of car and securely attached to frame.
- 11.3 A full racing seat belt harness must be used, harness must be secured to frame, not seat.
- 11.4 All cars must have a quick release type steering wheel.
- 11.5 All cars must have working starter, operated from inside car.
- 11.6 Battery must not be located in driver's compartment.
- 11.7 All drivers must wear full fire resistant uniforms.
- 11.8 No electronic or computer controlled devices or data acquisitions systems allowed.

# LM 12 FUEL CELL / FUEL:

- 12.1 An approved fuel cell must be securely mounted in the trunk area of the car, inside a .20 gauge metal box supported by a minimum of two 2" by 1/8" steel straps.
- 12.2 All fuel cells must be completely visible from rear of car.
- 12.3 Fuel cell must not be mounted lower than bottom of quick-change rear end.
- 12.4 Only gas and Alcohol, no nitrous oxide, nitro methane or other nitrate additives.

### LM 13 TRANSMISSION:

- 13.1Drive train must have transmission, mounted on rear of engine- no direct drive or inout boxes.
- 13.2 Any transmission, with working forward and reverse gears permitted, and must lead to one drive shaft.
- 13.3All drive shafts must be painted white or silver, and must be protected by a minimum of one (1) safety hoop or a sling.

# LM 14 REAR END:

14.1 Any type of rear end / differential permitted.

### LM 15 BRAKES:

- 15.1All cars must have operational four-wheel braking.
- 15.2No carbon-fibre brake parts will be allowed.

### LM 16 WHEELS:

- 16.1 Any brand or type of wheel allowed must be mounted with lug nuts.
- 16.2 No knock-off or center-locks wheels.

- 16.3 C. Maximum wheel width- 14".
- 16.4 D. Maximum width, side to side on outside of front tyres 90".
- 16.5 E. Maximum width, side to side on outside of rear tyres 88".

#### LM 17 TYRES:

17.1 Tyre rule Hoosier + American Racer 1350 to 1600 only.

### LM 18 EXHAUST/MUFFLERS: MUFFLERS REQUIRED

- 18.1 No modifications and/or alterations to mufflers will be allowed.
- 18.2 Collector type headers required.
- 18.3 All cars must register under 103 decibels.

### LM 19 ENGINES:

- 19.1 Engine setback will be 6" (six) maximum for (B) engine and 8" (eight) inches
- 19.2 maximum for (A) all cast iron head & block engines measured from center of top ball
- 19.3 joint to most forward spark plug. (1" Tolerance)
- 19.4 All heads are limited to 1 (one) spark plug and 2(two) valves per cylinder.
- 19.5 No titanium, or other "exotic" material, crankshaft or connecting rods allowed.
- 19.6 There must be an inspection hole, minimum 1" diameter in oil pan for Rod & crank
- 19.7 inspection or be willing to pull oil pan for inspection.
- 19.8One four-barrel carburetor only of any manufacture. Fuel injections are permitted; NO blowers and turbo-charges are allowed.
- 19.9 Mechanical fuel pumps, electric fuel pumps and no pressurized fuel systems.
- 20 Magnetos permitted, but all cars must have an operating self-starter.

LINGTINE.2200 EBS	CHATE ENGINE.2500 EBS	
UNLIMITED CUBIC-INCH	UNLIMITED CUBIC-INCH	
ALL-CAST IRON BLOCK	CAST-IRON OR ALUMINIUM BLOCK	
12' SPOILER	OPEN HEADS - 8" SPOILER	
1" TOLEDANICE (ENCINE SETDACK)	1" TOLEDANCE (ENCINE SETDACK)	

CRATE ENGINE: 2300 LBS

# LM 20 WEIGHT:

20.1 Crate / with driver 2200lbs.

ENGINE 2200 LBS

- 20.2 Super / with driver 2300lbs.
- 20.3 Minimum weight will be measured with driver in car.
- 20.4Attached weight must be securely bolted to frame with half" or larger bolts and painted white or silver with car number clearly painted on them.
- 20.5 No weight may be attached to rear bumper.

### CRATE LATE MODEL ENGINES:-B

A. Max 450 HP and 12" spoiler

# SUPER LATE MODEL ENGINES:-A

A. Engine are open and 8" spoiler

# GENERAL: SUPER AND CRATE LATE MODELS:

A. Engine setback will be 6" from center of top ball joint to the most forward spark plug on the jig-frame car. 1" tolerance on engine setback.

### GENERAL DIRT OVAL RULES: GDOR:

- 1.1 Cars can be weighed at any time before, during and after a race on request of the CoC or TC.
- 1.2 Anyone caught fighting in the pit area will be suspended from the pit area.
  - i) First offense = one year;
  - ii) Second offense = two years;
  - iii) Third offense = suspended from DO4SA.
- 1.3 Any driver or pit crew member that enters another driver's pit area will be deemed to be "the aggressor(s)".
- 1.4 Away from either driver's pit area, both drivers or their pit crew members will be considered "the aggressor(s)", and will receive a suspension penalty.
- 1.5 Drivers should be aware that they will be held responsible for all members of their race teams.
- 1.6 Any driver who enters the grandstand area and/or proceeds to enter another competitor's spectating area without invitation and conducts him or herself in any un-sportsman-like manner may be suspended.
- 1.7 Any competitor whose car(s) is found to be illegal will be suspended from the event and possibly the season.
- 1.8 Refusing to obey officials could result in a suspension of the event.
- 1.9 When a driver is suspended, his/her suspension term will begin on commencement of his/her next home -club event.
- 1.10It is the responsibility of the competitor to sign-on under the correct division and he/she may only compete in one division(class) per race-car entered.
- 1.11The participating competitors name must match the sign-on sheet entry. In the event of a driver change, officials must be notified and the sign-on sheet must be amended prior to the start of the driver's division.
- 1.12 No changes will be allowed after drivers briefing.
- 1.13 Club points will be awarded as follows: 1-24; 2-20; 3-18; 4-16; 5-15; less 1point per position hereafter.
- 1.14When a driver moves out of the pack before the starting flag drops, it will be considered as a jump-start and put to the back of the pack, for a second offense the driver will be excluded from the heat and send to the infield.

### "WHAT IS NOT SPECIFICALLY PERMITTED IS DISALLOWED"

This means that you may only do something if the rules say you may. Competitors and officials alike shall adopt the following principle when reading and applying the rules: They should only be concerned with the normal plain meaning of the wording of the regulations and shall pay no attention to any claim as to what the regulations were intended to mean.

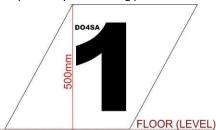
Asked the DO4SA TC if you are not sure about the meaning of a rule.

# HOW TO MEASURE A WING END-PLATE

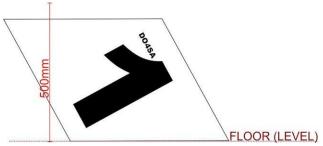
A. The 4-Cylinder rule for a wing endplate size is a maximum of 500mmx500mm.



B. How do you take this measurement when the plate is not square? The same plate above has been skewed in the picture below. GUIDE: ALWAYS USE THE FLOOR (OR LEVEL) along the bottom of the endplate as your starting point from which to measure.

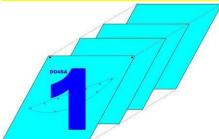


C. Now you can turn the wing onto its other side (or simply use your level on the other side if the wing is fitted to the car). GUIDE: ALWAYS USE THE FLOOR (OR LEVEL) along the bottom of the endplate as your starting point from which to measure.



- D. Attempting to measure it any other way will result in measurements of e.g. 540mm. Always remember to measure as if the bottom of your measurement is lying on the floor on you are measuring from the floor upwards.
- E. To measure the inner plates (allowed in select classes), simply pull fishing-gut or string from one corner of the endplate to the same corner of the opposite endplate.

  MAXIMUM 2 ENDPLATES AND 2 INNER PLATES, TOTALING 4 PLATES PER WING: (see diagram below)



The inner plates should be contained within the confines of the endplates (as indicated by the dotted-line in diagram).

# HOW TO MEASURE WING-HEIGHT AND OVER-HANG

# **HEIGHT MEASUREMENT:**

# HEIGHT OF WING IS MEASURED FROM THE CENTRE OF THE HORIZONTAL-VANE TO THE HIGHEST POINT OF THE ROOF

- A. Place a plank or straight-edge on top of the center-point of the horizontal vane;
- B. Place a spirit-level on top of the plank. Get it level.
- C. Measure the distance from the bottom of the plank to the highest point of the roof.

### **OVER-HANG MEASUREMENT:**

OVERHANG OF THE WING REFERS TO THE FACT THAT THE CENTRE-POINT OF THE HORIZONTAL VANE OF THE WING MAY NOT PROTRUDE BEHIND THE REAR-BUMPER.

- A. Take a plumb-bob (a nut on the end of a piece of string will work perfectly) and hang the string from the center-point of the horizontal vane with the nut or "bob" hanging just above the rear-bumper.
- B. The string, or plumb-bob may not be more than 100mm away from tailgate.(rear of boot panel).
- a. The reason for this explanation is that we have had many enquiries as to the overhang and height measurement of wings.
- b. In certain instances, the endplate tips may in fact hang over the end of the bumper depending on wing design, however, after consulting with all major chassis-builders in dirt oval, it has been clarified that the measurement is taken from the center-point of the horizontal vane.
- c. Remember that the endplates may NEVER stick over the sides of the body. The reason for this is to prevent wing endplates catching each other on the track when cars are passing each-other.
- d. The entire wing needs to be contained within the confines of the endplates Please refer to OTs should you have any queries.

# **DO4SA OVAL RACETRACKS**

1.	Weskus oval track:	Race line 498 m	Outer line 587 m Ir	nner line 475 m
2.	George oval track:	Race line 435 m	Outer line 475 m	Inner line 420 m
3.	Oudtshoorn oval track:	Race line 500 m	Outer line 549 m	Inner line 475 m
4.	Victory oval track:	Race line 443 m	Outer line 530 m	Inner line 415 m
5.	PEOTR oval track:	Race line 490 m	Outer line 567 m	Inner line 473 m
6.	Border oval track:	Race line 392 m	Outer line 458 m	Inner line 368 m
7.	SPS oval track:	Race line 438 m	Outer line 509 m	Inner line 396 m
8.	BHO oval track:	Race line 488 m	Outer line 517 m	Inner line 464 m