



TAR OVAL REGULATIONS

The contents of this Hand Book take effect from 01st October 2018

Consult www.motorsport.co.za for category regulations, as well as any updates or changes made throughout the year.

IMPORTANT NOTICE

The Oval Standing Supplementary Regulations (SSR's) are referred to as "OT's".

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

Oval racing is in the first instance administered by the rules and regulations contained in this rule book. However the rules must be read in conjunction with the relevant GCR's. As an aid to competitors certain relevant GCR's are reprinted in this book. This list is not exhaustive and the mere fact that it is not printed in these regulations does not mean that it does not apply.

Importantly, please refer to GCR 225, which states: *Where there is a contradiction between the GCR's and the SSR's (in this case the OT's), the latter takes precedence except where the category regulations provide otherwise. This does not apply to International events, which are run under the relevant International Sporting Code.*

This means that in the first instance you apply the oval rule book (OT's) and if the oval rule book does not deal with a particular issue you refer to the GCR Handbook.

INTERPRETATION OF REGULATIONS AND SPECIFICATIONS

The following GCR is the basis to interpreting all the regulations that apply to motorsport.

GCR226 states: *In interpreting motorsport regulations and specifications "what is not specifically permitted is disallowed" is the normal concept in keeping with the French regulations on which all motor sporting regulations are based."*

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.*

PART 1 APPLICABLE TO ALL EVENTS

OT1 COMPETITORS

1.1 ACTIVE COMPETITORS

“Active competitor” shall mean a competitor who has participated in at least fifty percent (50%) of events organised by the club he /she has indicated as his / her home base within a specific racing season. For the purpose of this definition “participate” shall require the competitor concerned to have completed at least one race at each event in which he /she participated.

1.2 SEASONED COMPETITORS

1.2.1 If you race in a higher class on the day you are not allowed to race in the Stock Rod Class.

1.2.2 All annual MSA licences must be done via the MSA online licencing system (www.msaonline.co.za). Please refer to part V of the MSA GCR Handbook.

1.2.3 Competitors who have no previous race experience will not be allowed to participate at Regional or National Championship level until they have successfully competed in at least three (3) Club events. Such rookie shall be obliged to mark his / her car so that officials and fellow competitors are aware of his / her rookie status.

1.2.4 Only one licence shall apply for all Tar Oval Classes.

1.3 MINIMUM AND MAXIMUM AGES FOR COMPETITORS

1.3.1 For all classes (except the Mini Class) drivers must not be younger than 16 years old.

1.3.2 For the Mini Class, drivers must not be younger than 10 years old and may not be older than 18 years old (without a legal driving licence) when joining the class. A competitor may remain in this class for the remainder of the season in which he / she turns 18.

1.4 MOVEMENT OF COMPETITORS BETWEEN CLUBS

1.4.1 The object of this rule is to provide for an orderly movement of competitors in respect of how and where they register and race. This rule must be subject to the Constitution of South Africa and accordingly this rule cannot deny any competitor his / her right to choose where he / she wants to be a member or with whom he / she chooses to associate. This rule does not prohibit a competitor from being a member of more than one club. The rules similarly must reinforce club constitutions and allow them to take steps against troublesome competitors. The rule must protect all the stakeholders and fellow competitors by providing a framework for certainty of participation at events agreed to by promoters / clubs.

1.4.2 Each competitor shall select a single venue as a home base for a specific formula which election shall coincide with the valid period of his / her MSA licence. Once a competitor has selected his / her home base, he / she may not leave that home base and join another club unless he / she has resigned from the former in terms of their constitution. The office bearers of the prospective club shall ensure that the competitor concerned is in possession of a letter releasing him / her from his / her previous home base commitment.

1.4.3 The releasing club shall not be entitled to withhold the release of a competitor, except in circumstances where they intend taking disciplinary action against the competitor. In such cases that club shall institute such action within seven (7) days of the competitor’s written resignation, failing which they shall be barred from taking action and shall be deemed to have released the competitor concerned.

1.4.4 A competitor shall not be entitled to change club until the conclusion of the 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 / her

club once any period of suspension imposed on him / her has been served. Conversely the competitor will be entitled to his / her immediate release should the disciplinary body above rule in his / her favour. The provisions of GCR 218 shall apply.

- 1.4.5 Where a dispute arises between a competitor and his / her 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 MSA shall act as arbitrators in the matter and their ruling shall be final.
- 1.4.6 Should any competitor or club fail to comply with this sub-rule they shall be liable to the imposition of a fine and / or suspension and a fine respectively. This regulation cannot and does not interfere with any agreements made between organisers and drivers, whether these agreements are in writing or not. Disputes regarding such agreements must be resolved using the legal processes available.
- 1.4.7 Clubs, organisers and promoters may not under any circumstances restrict a competitor from taking part in other 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 in accordance with that organisation's prescribed communications channels, of their intention to take part in any event not inscribed on the home base calendar. This sub-rule shall not apply to Regional and National Championship status events.
- 1.4.8 Should a competitor feel he / she is being pressured in any way to stay away from meetings by his / her club, he / she has the right to report the matter directly to MSA, who may at their discretion elect whether or not to investigate the matter.

OT2 MSA OVAL STRUCTURE

2.1 DEFINITIONS

- 2.1.1 *Promoter:* A promoter shall be defined as a club, body or person who is affiliated to MSA.
- 2.1.2 *Venue:* A venue shall be a Tar Oval racing facility.

2.2 REGIONAL STRUCTURE

Each MSA Regional Committee will have a Tar Oval Representative in regions where there are MSA affiliated Tar Oval Clubs. Representatives will be duly nominated and elected to serve on these Regional Committees.

OT3 RESERVED

OT4 RESERVED

OT5 DATE ALLOCATION

Dates shall be allocated in the following order:

- National Championship events
- Thereafter Regional Championship events shall take precedence, unless incorporated into the national series.
- Thereafter Club Championship events.

- MSA will determine the venues and dates for the National Championship events in conjunction with the role players.

OT6 LICENCING AND GRADING OF TRACKS

- 6.1 Tracks will be graded on an annual basis.
- 6.2 The inspection shall be scored in terms of the score sheet approved by MSA from time to time.
- 6.3 The venue shall pay the inspection fee as per agreement with relevant track safety inspector to MSA before the inspection takes place. The reasonable cost of the track inspector in respect of travel and accommodation are for the account of the venue.
- 6.4 The Track Inspector may issue a provisional grading and may require additional works to be undertaken before the issue of a grading and / or licencing of the track by MSA.
- 6.5 Venues shall be graded according to their suitability to host Club / Regional or National / International events.
- 6.6 A track licence is only valid for so long as there is no material alterations to the track or its immediate surroundings. The licence accepts, as a term of the licence that may be issued, that it will forthwith advise MSA if there are any alterations to the track or its immediate surroundings during the period of the licence.
- 6.7 MSA reserves the right to inspect the track at any time during the currency of a licence. If, as a result of such inspection MSA 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 MSA as to the suitability of the track, MSA will have the right (but not obligation) to retract this licence. 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 to the reversal of such retraction. Otherwise such retraction will only take place after notification to the licensee granting them a period of 14 days in which to remedy any defect in the track or to submit representation to MSA as to why the licence should not be revoked.
- 6.8 Neither MSA nor the appointed Track Inspector does, by the issue of a licence 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 relations to events held at the licenced track.

OT7 RESERVED

OT8 GRADING OF OFFICIALS

- 8.1 It is important to note that every person that officiates at events (Clerks of the Course, Observers, Stewards, Technical Consultants, Scrutineers, Lap Scorers, Starters and Marshals) must be licenced 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. Unlicensed officials are not covered by the MSA insurance.
- 8.2 GRADING OF OFFICIALS
- 8.2.1 National Grade – Grade A which shall allow the official to take charge of the particular function at any event.
- 8.2.2 Regional Grade – Grade B which shall allow the official to take charge of the particular function at events up to Regional status.

- 8.2.3 Club Grade – Grade C which shall allow the official to take charge of the particular function at events of Club status.
- 8.2.4 Notwithstanding examination results a grading may be withheld if MSA does not believe the aspirant Clerk of the Course has the experience or temperament to handle National Championship events.
- 8.2.5 All officials will be subject to ongoing review at Club and Regional level.
- 8.2.6 MSA shall discuss the performance of all officials for all events held in conjunction with the MSA Regional Committee.
- 8.2.7 Officials who hold a grading for numerous positions must demonstrate an on-going use of the grading in each division in order to retain the grading.

OT9 POWERS, DUTIES AND PLACEMENT OF OFFICIALS

This rule is to be read in conjunction with Part VII of the MSA Handbook.

- 9.1 No official may compete at any event where he / she is an official. It follows that he / she cannot officiate in a class in which he / she competes or has family competing in that class.
- 9.2 Where members of the same family act as officials, permission must be obtained from MSA in writing (refer GCR 145 iii).
- 9.3 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 / herself to any hazard that is not essential to the performance of their duties. The positioning of the officials below are considered ideal and shall apply to all events.
- 9.4 The **Race Controllers** (collective term for Clerks of the Course and Stewards) shall:
 - 9.4.1 Make all decisions with the least amount of delay and communicate same to the competitors and officials in appropriate fashion.
 - 9.4.2 Officiate from elevated positions 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 channelled through him / her. The Clerk of the Course posted on the start line may also act as a Starter, provided he / she is not solely in charge of the particular race.
 - 9.4.3 Be in constant radio (or other) contact with at least 3 circuit marshals described in OT9.11 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 official.
 - 9.4.4 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.
 - 9.4.5 Hear the protests of competitors. The Clerk of the Course who had control of a race shall not be privy to the deliberations concerning a protest. He / she shall obviously give evidence and reasons for a decision he / she may or may not have taken.
 - 9.4.6 Consist of a body of at least 4 people made up as follows:
 - Clerk of the Course
 - Assistant Clerk of the Course
 - Two Stewards (one MSA Steward and one Club Steward)
 - 9.4.7 The appointed Clerk of the Course shall assume full executive responsibility for the specific race meeting.
 - 9.4.8 Exclude, reprimand or fine competitors when called upon to do so in these regulations, shall supervise the starter in respect of the starting procedures and the number of laps run.

- 9.4.9 Ensure that all signals are conveyed to competitors in a clear manner.
- 9.4.10 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 & 157 of the MSA Handbook to the extent that those duties and powers are not in conflict with other stipulations of these rules.
- 9.4.11 Address queries from competitors.
- 9.4.12 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.
- 9.4.13 Ensure that the race regulations detailed elsewhere in these rules are applied with consistency and even-handedness.
- 9.4.14 Note the input of his / her assistants and the input from the competitors in making decisions or taking action.
- 9.4.15 The Assistant Clerk of the Course shall:
 - Have primary duties of invoking caution flag, full caution / safety flag or race stoppage (red flag) procedures regarding an incident in his / her sector of the track and reporting factual accounts of general racing incidents to the Clerk of the Course who has control over the race.
 - Carry out the duties of marshals once there has been a stoppage or incident.
- 9.4.16 The Stewards shall carry out the duties as per GCR 151 – 157.

9.5 The **Scrutineers** shall:

- 9.5.1. The competitor is in the first instance responsible to scrutineer his own car and the scrutineer must carry out the duties stipulated in GCR's 166, 252, 253 and 254 of the MSA Handbook. A Scrutineer may not have any interest or connection to a vehicle he is inspecting.
- 9.5.2 Re-examine any vehicle that was involved in an incident that caused structural damage to the vehicle that was serious enough to prevent the competitor in question from completing the race or practice.
- 9.5.3 Re-examine any vehicle as and when instructed to do so by the Clerk of the Course, Stewards or Technical Consultants.
- 9.5.4 Examine vehicles for compliance with the construction, and class regulations, applicable specific regulations that may apply to the event, championship series or other series events.
- 9.5.5 Specifically ensure that the brakes are tested and found to be operational.
- 9.5.6 Examine vehicles for compliance with the sponsorship advertising requirements stipulated in the SR's of the event.
- 9.5.7 Ensure that the time at which the vehicle passed scrutiny is noted in the competitor's logbook.
- 9.5.8 Ensure that the competitor has completed documentation.
- 9.5.9 Notify the competitor of any fault that have been detected.
- 9.5.10 Afford the competitor and opportunity of remedying such shortcoming by no later than 30 minutes after the end of documentation or scrutiny.
- 9.5.11 Reflect all faults in the competitor's logbook and submit a report, listing all the faults located, to the Clerk of the Course, before commencement of the racing.
- 9.5.12 Affix a scrutineering sticker to each vehicle that has passed scrutineering.
- 9.5.13 Have the authority to reject any competitor's vehicle that does not comply with the regulations, this only after consultation with the Clerk of the Course.
- 9.5.14 Be responsible for the Parc Ferme and other designated areas used during pre-race and post-race examination of cars.
- 9.5.15 Not convey any information obtained at scrutineering to any person other than the competitor concerned, the Clerk of the Course or the Technical Consultants.
- 9.5.16 Ensure that all tyres are marked, if required, and checked during the event.
- 9.5.17 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.
 - Present no hazard to the competitor, another competitor or other vehicles.
- 9.5.18 Have regard to the content of the competitor's logbook, a static examination of the vehicle as well as the performance of the vehicle in any official practice period or race formulating his opinion about compliance with the regulations.
- 9.5.19 Require a competitor to seat himself in the vehicle to determine the suitability of safety features such as the roll cage and safety belts.
- 9.5.20 Ensure that the vehicles meet the requirements in respect of the size and eligibility of the numbering.
- 9.5.21 Check the competitor's ability to evacuate his race car within 10 seconds.
- 9.5.22 Specifically check the condition and fittings of all fuel hoses – both feed and return lines.
- 9.5.23 Specifically check the competitor's compliance with the regulations in respect of safety clothing by having the competitor clothe himself with the gear presented.

It is compulsory for Oval Scrutineers to inspect all oval competitor's driving apparel at scrutiny at every event – irrespective of the status of the event. Competitors failing to comply with MSA's safety requirements regarding protective clothing may **under no circumstance whatsoever be allowed to practice or start an event.**

- 9.6 The **Timekeeper** shall:
- 9.6.1 Be seated in such a manner that it is possible to measure the time taken by the competitor to complete a lap.
- 9.6.2 Carry out the duties set out in GC 163.
- 9.6.3 Official timekeeping devices should be approved by MSA
- 9.7 The **Lap Scorer** shall:
- 9.7.1 Record the competitor's positions at the end of each lap and of each race of the event.
- 9.7.2 Record the results of each race.
- 9.7.3 Be positioned in line with the start / finish line, with a clear view of the line.
- 9.7.4 Complete result sheets for distribution to competitors throughout the event or as set out in the SR's for the event.
- 9.7.5 Bring into account any deduction of points, exclusion(s) or re-instatement(s) ordered by a authorised official.
- 9.7.6 Prepare the result sheets to be posted at the end of the event.
- 9.8 The **Chief Marshal** shall:
- 9.8.1 Have overall responsibility for the marshals at each event.
- 9.8.2 Ensure that the track surface, markings and protective barriers are maintained in good order throughout the meeting.
- 9.8.3 Ensure that the firefighting equipment is readily available and correctly sited and that his assistants and the paddock marshal are familiar with its operation.
- 9.8.4 Ensure that there is sufficient brooms, spades and cement available.
- 9.8.5 Take charge of the recovery vehicle operations.
- 9.8.6 Ensure that all entrances to the track are properly manned and that no unauthorised person(s) enter this area.
- 9.8.7 Ensure that sufficient marshals (wearing distinctive vests or uniforms) are present throughout the event.
- 9.8.8 Be positioned on the infield.

9.9 The **Circuit Marshals** shall:

- 9.9.1 Be primarily involved in communication between the competitors and the race officials by responsible for the operation of the lights and flags. They also act as observers.
- 9.9.2 Carry out the duties as set out in GCR 170 of the MSA Handbook.
- 9.9.3 Pay close attention to the racing on the track.
- 9.9.4 Show the appropriate warning signs to the competitors in respect of dangers in the sector of the track under his / her control.
- 9.9.5 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.
- 9.9.6 Immediately ascertain if a competitor is injured in an incident in his vicinity, in which case he shall show the appropriate signal.
- 9.9.7 Report factual accounts of incidents, accidents, offences or breaches of regulations to the Clerk of the Course.
- 9.9.8 Be posted as follows. One marshal on each of the two corners with the clear understanding that this marshal shall relocate him / herself when the direction of the 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. One marshal on the back straight directly opposite the start / finish line.

9.10 The **Arena Marshals** shall:

- 9.10.1 Be responsible for the rendering of assistance to competitors, removal of vehicles, cleaning of the track and its verges and will be deployed from the centre of the arena.
- 9.10.2 Assist the Scrutineers with the control of the Parc Ferme after the completion of the racing.
- 9.10.3 Remove vehicles that have stopped in his / her vicinity from the track when it is safe to do so.
- 9.10.4 Assist with crowd control when necessary.
- 9.10.5 Carry out any instruction given to him / her by any member of the medical crew, the Chief Marshal, the Clerk of the Course or the Stewards.
- 9.10.6 Remove all debris from the race track when it is safe to do so.
- 9.10.7 Attend to the sweeping and laying of cement in case of an oil spillage, as soon as it is safe to do so.

9.11 The **Response Marshals** shall:

- 9.11.1 Be on the lookout for emergencies that require their attention.
- 9.11.2 Respond to such emergency as soon as it is possible, always having consideration for the safety of all involved.
- 9.11.3 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.
- 9.11.4 Be responsible for the firefighting services on the track and shall be trained as such.
- 9.11.5 Ensure that they have the required safety equipment and clothing to render these services.
- 9.11.4 Be positioned as follows. Two 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.

9.12 The **Gate Marshal** shall be responsible for opening and closing the gates in terms of the instructions given to him / her and shall operate the gates in a safe manner.

- 9.13 The **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.
- 9.14 The **Chief Paddock Marshal** and his team shall:
- 9.14.1 Maintain orderly conduct in the paddock and / or pit area.
 - 9.14.2 Notify the competitors to assemble in their respective grid positions on the dummy grid prior to each race.
 - 9.14.3 Ensure that no competing vehicles goes onto the track unless it has been approved by the Scrutineers.
 - 9.14.4 Ensure that the pit gates are closed and secured.
 - 9.14.5 Receive the names of all withdrawals and convey them to the Clerk of the Course / Lap Scorers.
- 9.15 The **Secretary of the Meeting** shall:
- 9.15.1 Carry out the duties set out in GCR 159.
 - 9.15.2 Ensure that all competitors hold the correct licence and have signed the sign on sheets.
 - 9.15.3 Record the time of entry of each competitor, who shall countersign same.
 - 9.15.4 Ensure that all officials and drivers have completed the sign on sheet and that their mechanics names are recorded. Mechanics must also sign on at the gate.
 - 9.15.5 Ensure that competitors comply with specific eligibility regulations that may apply to the event, championship or series of events.
 - 9.15.6 Ensure that all competitors and their crews are issued with the applicable means of pit entry.
- 9.16. The **Technical Consultant(s)** shall:
- 9.16.1 Be a person or persons, approved by MSA, who hold suitable qualifications (gained in theory or practice) to enable them to check compliance with specifications. The Technical Consultant(s) is responsible to the Clerk of the Course.
 - 9.16.2 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 MSA, the Organisers, the Stewards or the Clerk of the Course.
 - 9.16.3 The Technical Consultant, in conjunction with the Scrutineers, Organisers and the Clerk of the Course is responsible for the management of the post event procedure regarding technical compliance. The Technical Consultant may not get involved in the general organisation and running of the event.
 - 9.16.4 Report their findings which shall include details of the actions they propose to take against the competitor, to the Clerk of the Course as soon as possible after the completion of the examination.
 - 9.16.5 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.
- 9.17 The **Environmental Officer** shall perform the functions as set out in the relevant MSA Environmental Code.

OT10 PIT CREW

- 10.1 Shall not be allowed on the track unless they have the prior approval of the Clerk of the Course.
- 10.2 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 Clerk of the Course, Stewards, MSA or the Organisers as the case may be.

- 10.3 Not interfere with any official, nor shall involve themselves with any derogatory action, sign or proceeding against any such official.
- 10.4 Not consume alcohol immediately prior to the event, or while the event is in progress until 30 minutes after the last race.
- 10.5 Not assist or aid any unauthorised person to gain access to the demarcated pit area.
- 10.6 At all times display the identification utilised by the organisers of the event in question.
- 10.7 Not touch a competitor's vehicle while it is on the track.
- 10.8 Not make a fire or have an open fire in the pits.

OT11 FLAGS AND WARNING SYSTEMS

- 11.1 The minimum size of a flag is 60cm x 80cm. Flags shall be mounted so that they can be easily and safely handled by all officials.
- 11.2 The number signalling board to be used by the Clerk of the Course shall have white letters, at least 100mm high on a black background.
- 11.3 The flags shall be stored in holders adjacent to the official's post.
- 11.4 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.
- 11.5 The regulations only refer to the use of the 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 the flags below.
- 11.6 When these regulations require a flag to be deployed the previous flag shall be withdrawn if it is still being shown.
- 11.7 **Start Flag**
 - 11.7.1 The flag utilised shall be the MSA flag. A green MSA flag is preferred.
 - 11.7.2 The flag shall be operated by the starter in accordance with the instructions contained in the rules regarding starting.
 - 11.7.3. 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.
- 11.8 **White Flag**
 - 11.8.1 The flag is shown from the start / finish line and may not be waved.
 - 11.8.2 The flag is operated by the starter to indicate:
 - a) That the start procedure is about to commence.
 - b) The commencement of the last lap.
 - 11.8.3 A flashing white light or stationary white lights around the circuit may replace the flag.
- 11.9 **Finish Flag**
 - 11.9.1 The flag utilised shall be a black and white chequered flag, usually waved.
 - 11.9.2 The flag shall be displayed at the finish line until all the competitors have completed the race.
 - 11.9.3 The flag shall also be operated by the starter.
- 11.10 **Green Flag**
 - 11.10.1 The green flag has many uses, depending on the circumstances in which it is shown.
 - 11.10.2 The flag generally means that all is clear and racing can start or continue.

11.10.3 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.

11.10.4 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.

11.10.5 The flag may be replaced with a green light.

11.10.6 The Starter in turn has numerous reasons for displaying the green flag, being:

- a) To signal to competitors that the track is clear to start warm up laps.
- b) To signal to competitors that a race being raced under safety (yellow flag) can be restarted.

11.10.7 The operation of the green flag by the Starter, shall be the same as the starting flag.

11.10.8 The said green flag may be replaced by the light arrangement referred to in the starting flag section above.

11.11 ***Yellow with red stripes Flag***

11.11.1 The flag is utilised by the circuit marshals to indicate a change in or on the racing surface or an obstruction.

11.11.2 The flag may accordingly be utilised to indicate obstructions which include a competitor who have spun and standing on the track or the verge of the track and for instances such as water, oil, sand or other material on the circuit.

11.11.3 Competitors are expected to familiarise themselves with the circuit, as the flag need not be shown for the whole race.

11.12 ***Black Flag***

11.12.1 The flag shall only be shown from the start / finish line.

11.12.2 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 signalling the number of the competitor concerned.

11.12.3 A competitor being shown the said flag shall stop immediately, having been excluded by the Clerk of the Course.

11.12.4 The flag shall only be utilised by the Clerk of the Course after he / she has considered all other options available to him / her. **It is recommended that the Clerk of the Course utilise the various other regulations at their disposal before deploying the above flag.**

11.12.5 A competitor who has been black-flagged shall be regarded as a non-finisher of the race in question and shall be awarded zero (0) points. Failure by a competitor to respond to a black flag shown to him/her on two or more consecutive laps and/or to immediately report to the Clerk of the Course having responded to a black flag, shall render offenders liable to be penalised by the clerk of the Course in terms of the provisions of GCR 157.

11.12.6 Once this flag is shown to a competitor, the flag cannot be overturned.

11.13 ***Black and white flag***

11.13.1 The flag shall be divided into black and white halves diagonally.

11.13.2 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 signalling the number of the competitor concerned.

11.13.3 The flag indicates to the competitor that he /she is being warned for a contravention of the regulations, or indicates that a competitor is engaging in deliberate obstructive tactics.

11.13.4 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.

11.13.5 The flag shall only be utilised by the Clerk of the Course after he / she has considered all other options available to him / her. **It is recommended that Clerks of the Course utilise the various other regulations at his / her disposal before deploying the above flag.**

11.13.6 A competitor shown this flag shall report to the Clerk of the Course immediately after the race in question. Failure to do so may render offenders liable to be penalised by the Clerk of the Course.

11.14 **Black flag with orange dot**

11.14.1 The flag is black and has an orange dot, with a diameter of at least 40cm on it.

11.14.2 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 signalling the number of the competitor concerned.

11.14.3 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.

11.14.4 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 / she 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.

11.14.5 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.

11.14.6 Given the gravity of the reasons for the deployment of the flag, **Clerks of the Course should use the flag with circumspection as it cannot and should not be withdrawn once deployed.**

11.15 **Yellow Flag**

11.15.1 The flag is used to invoke the safety flag status. It may be deployed by any of the Circuit Marshals but only on the instructions of the Clerk of the Course 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 be withdrawn once deployed. Marshals must realize that the use of the flag involves a process that may be detrimental to the leading competitor.

11.15.2 The deployment of the flag in response to race regulations is the sole responsibility of the Clerk of the Course.

11.15.3 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.

11.15.4 The alternative use of the flag is to regulate the warm-up lap procedure in which case it is deployed by the Starter.

11.15.5 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.

11.15.6 Any competitor who ignores the yellow flag and overtakes any other competitor while the yellow flag is out will be given a penalty as prescribed in the rules.

11.16 **Red Flag**

11.16.1 The flag is used to stop races and may be deployed on instructions from the Clerk of the Course only 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. The deployment of the flag in response to race regulations is the sole responsibility of the Clerk of the Course.

11.16.2 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.

11.16.3 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.

11.17 Blue Flag

11.17.1 The blue flag shall be light blue and shall have a distinctive black cross over it.

11.17.2 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 / she is being lapped, or is holding up the race (see OT 27.2)

11.17.3 The blue flag must be waved to a competitor when he /she is holding up another competitor. This must be shown to the competitor for two (2) laps and if he / she ignored this flag, he / she must be black flagged on the third lap. A competitor, deliberately holding up another competitor at the start or during a race, must be penalised.

11.18 White flag with a red cross

The flag is used by Marshals to indicate Medical emergencies.

11.19 Yellow flag with a red arrow

11.19.1 This flag shall be yellow and the arrow shall be on both sides of the flag and shall be as large and as visible as possible.

11.19.2 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 from the Clerk of the Course) it shall also be deployed at the pit gate.

11.20 Signal Boards

The following signal boards, complying with the sizes in OT11.1 are compulsory at all events:

- a) Back of the 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 / she is to go to the back of the field.
- b) Lap counting boards – for at least the last five (5) laps.
- c) A board to indicate the amount of laps to be run.
- d) A board instructing competitors to reform in original positions.
- e) A board instructing competitors to reform in single file.
- f) A chalk board and chalk to indicate to competitors the number of the vehicle being penalised.

OT12 ELIGIBILITY OF CARS / CHANGE OF COMPONENTS

12.1 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.

12.2 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 MSA 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 organisers wishes to present. Here organisers will need to satisfy MSA in respect of the need for the proposed class.

12.3 MSA may require the organisers to perform such checks in regard to eligibility as it may stipulate.

- 12.4 Any new class at club level is to be authorised by MSA, upon proper written application, prior to the establishment of such a class.
- 12.5 A competitor may not enter more than one car for a particular class. He / she is limited to using the car with which he / she started the qualifying procedure, or after he / she has drawn for a grid position.
- 12.6 A competitor may enter different vehicles for different classes at the same event.
- 12.7 A competitor may enter the same vehicle in different classes at the same event, provided that the vehicle complies fully with the class regulations for all the classes. Should it transpire, after a technical evaluation that the vehicle does not comply with the regulations of one of the classes the competitor will be excluded from all the classes where he used the specific vehicle, irrespective of whether or not the vehicle complied in the other class.
- 12.8 A competitor may only compete in a class in which he / she 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 / she carried his entry through by signing on during documentation.
- 12.9 The following shall apply to the change of components:
- 12.9.1 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 / her intention to do so. The Scrutineer shall be entitled to impound any part that is replaced. Scrutineers shall record all their observations in writing.
- 12.9.2 Failure to comply with the above renders the competitor liable to exclusion.
- 12.9.3 Any part so removed shall comply with the class regulations and any non-compliance 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.
- 12.9.4 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.
- 12.9.5 Rules relating to technical items must be written in a way to make policing easy.

OT13 DETERMINATION OF GRIDS – GENERAL

- 13.1 There are four (4) ways of determining grids being:
- 13.1.1 Qualifying – as set out in OT14
- 13.1.2 Draws – as set out in OT15
- 13.1.3 Grading systems
- 13.1.4 Seeding or handicapping
- 13.2 The following shall apply to all methods of determining a grid:
- 13.2.1 The method to be used shall be clearly set out in the regulations for the series or event.
- 13.2.2 A competitor shall not be entitled to a re-determination of the grid if, upon investigation it transpires that he / she had signed onto the incorrect sheet at documentation. In such a case he / she 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 partial draw.
- 13.2.3 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 / she shall take up the place on the grid or qualifying behind the number he / she draws and all other competitors will move one position back. He / she

will remain in the sequence and shall invert as if he / she was drawn in that position.

OT14 DETERMINATION OF GRIDS – QUALIFYING

- 14.1 Whenever the SR's for an event or series regulations dictate that competitors need to qualify for grid positions these regulations will apply. The SR's shall set out the number of starters that will qualify for the races of the event concerned. The SR's or the series regulations shall set out the points to be scored from the results of the qualifying.
- 14.2 Qualifying will be under the control of the Clerk of the Course and the starter, the Timekeepers, the Lap Scorers and a full complement of Marshals will be at their posts. The organisers shall supply properly calibrated timing equipment to be used as the only official time recording system for the event. The same equipment on the day must be used for all qualifiers and will be deemed as the official timing equipment.
- 14.3 The organisers shall conduct a draw for the qualifying order. In a Regional or National series the draw will only be for the first event. Thereafter the order will be determined by the total points achieved thus far in the Championship.
- 14.4 Each competitor shall be afforded three (3) timed laps, with the best result to count for the determination of the grid. Cars with semi or slick tyres will be afforded two (2) warm up laps.
- 14.5 All competitors due to qualify in a particular class shall line up on the infield, in their qualifying order, upon being requested to do so by the Pit Marshal.
- 14.6 A competitor who fails to line up in his slot will line up last in the class. His time will also be adjusted by a factor of **1.025**. Competitors who have not lined up by the time the last competitor, other than those who failed to line up in their slots, have finished their qualifying laps will not be allowed to qualify and will be deemed to have posted the slowest time. No repair time will be allowed once the competitor has become under starters orders.
- 14.7 On Regional and National events, competitors in all classes will qualify for starting positions. The fastest qualifier will start the first race on pole position. A tie on qualifying will be resolved by placing the competitor, who achieved the time first, in the first position. The second race will be an invert of the starting order of the first race and the third race will be determined on total points for the first and second race. A tie on points after the second race will be resolved by the fastest qualifying time. In a case where positions were drawn, the best placing in the first race will be applicable.
- 14.8 The National Championship series will be open to all competitors who qualify through their clubs. Entries for the National Championship events must be routed through the Club Secretary. Day licenses will be available and can be obtained before the event.
- 14.9 All competitors, including those who needs push starts, shall qualify from the infield.
- 14.10 Competitors in classes that require push starting shall ensure that they have their own push start vehicles. Vehicles that need to be push started shall start and be capable of running by themselves after the completion one lap of the circuit. Vehicles that do not start shall not be awarded a qualifying time and will have to start from the back of the grid. This will be carried forward to resolve any ties.
- 14.11 Once a vehicle has come onto the track it comes under Starter's orders. The yellow flag will be out. Once the Starter is satisfied that the track is clear he will introduce the white flag as well. The next time the competitor come to the start line he shall receive the green flag which allows him to commence his warm up laps. Vehicles on slick tyres shall be afforded two (2) laps of the circuit. All other classes shall be afforded no more than one lap.
- 14.12 On the lap prior to completion of the warm-up laps the Starter will waive the white flag as well as the green flag to signify that he / she is to begin his / her timed laps on the next lap. He shall show the green flag once the timed laps start, the white flag at the start of the last lap of the timed laps and the chequered flag at the end of the timed laps.

- 14.13 The competitor shall thereafter slow down and leave the circuit to the infield, when it is safe to do so.
- 14.14 Competitors who suffer mechanical breakdowns, are involved in incidents or stop of own their accord during their qualifying session shall leave the circuit or be removed from the circuit as the case may be. Any time that they posted shall stand. If they failed to post a time they shall start at the back of the grid.
- 14.15 Competitors, who broke down, were involved in an incident or stopped without recording a time and those that could not start during their qualifying session, those who failed to line up and those who may have come late shall start last in the abovementioned order. Within these groups they shall start in the order they were drawn.
- 14.16 Should there be an incident on the track or a failure of the timing equipment the particular competitor's session will be stopped by means of the red flag. Should there be a timing equipment failure the competitor's session will be restarted and any time he may have posted will be scrapped. The officials of the event will be obliged to make practical arrangements to ensure that the competitor does not benefit from warm tyres as an example.
- 14.17 The following shall apply should the qualifying session of a particular class be affected by circumstances such as rain or a power failure:
- 14.17.1 If less than 20% of the field has qualified – a complete new qualifying session shall commence if the time limits for the event allow.
- 14.17.2 If more than 20% of the affected field has qualified – the session shall be delayed if the time limits for the event allow.
- 14.17.3 If the time limits do not allow the session shall be cancelled and the positions the competitor had in the draw for the qualifying order shall be the starting grid and the competitors shall not score for qualifying.
- 14.18 The results of qualifying shall be posted on the notice board as soon as possible after the end of the session.

OT15 DETERMINATION OF GRIDS – DRAW

- 15.1 **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 or by the Race Secretary.**
- 15.3 If the draw is done by the Race Secretary it is done after entries has closed.
- 15.3 The number of the disc drawn is allocated to the first (1st) driver on the entry list etc. until all the discs were drawn and all the grid positions are allocated.
- 15.4 Late entries will be added at the back of the already drawn grid as they enter.
- 15.5 If the competitors do the draw it is done after completion of documentations, but before drivers briefing.
- 15.6 The number of the disc drawn by the competitor will be his / her grid position for the first race.
- 15.7 Where heats are split 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.

OT16 CHANGING OF VEHICLES AND COMPETITORS

Once a competitor has started the first race in one vehicle, he / she shall not be permitted to:

- 16.1 Use his second vehicle if the first vehicle is unable to complete the event for any reason.
- 16.2 Swap the cars between the different classes he / she may have entered.
- 16.3 Change the class in which he / she is competing.
- 16.4 No change of driver of any kind will be permitted after qualifying has started or he /she has drawn a grid number.

OT17 ASSEMBLY OF THE GRID

- 17.1 The 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.
- 17.2 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.
- 17.3 Vehicles shall start two abreast.
- 17.4 The grid for the first cycle of rounds or heats shall be posted on the notice board as soon as possible after being determined.
- 17.5 The 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. 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.
- 17.6 A 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.
- 17.7 Competitors 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.
- 17.8 Competitors shall proceed onto the track, in single file, in the positions that they occupy on the grid. 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.
- 17.9 The final grid placing is only determined once the pit gate has closed for the race. 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.
- 17.10 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.
- 17.11 MSA 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.

OT18 STARTING PROCEDURE

- 18.1 All races shall commence with a rolling start.
- 18.2 Warm up laps, although not compulsory, shall form part of this procedure, if allowed. Please continue at sub-rule 18.7 below for starts that do not require warm-up laps.
- 18.3 The warm up laps shall be conducted as below.
- 18.4 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.
- 18.5 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.
- 18.6 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.

- 18.7 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.
- 18.8 The line-up marshal (or in his absence 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 or scoring him as the last place finisher of the race concerned 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.
- 18.9 All competitors shall line up on the pole position man.
- 18.10 Once the Starter or the Clerk of the Course is satisfied that start formation is correct he / she 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.
- 18.11 The competitor in pole position shall regulate the pace of the formation lap of the race.
- 18.12 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.
- 18.13 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.
- 18.14 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 / she would do so by moving to that position and being waved away by a Marshal. No competitor may join the race after the flag has dropped unless a complete restart of the race concerned is ordered by officials.
- 18.15 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.
- 18.16 A competitor that passes another competitor or leaves his / her position prior to the start of the race shall be adjudged to have jumpstarted 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. 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.

- 18.17 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.
- 18.18 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.
- 18.19 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.
- 18.20 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.
- 18.21 The sprint cars will have two cones, placed at a strategic position in the corner before the start. The pole car will start the race at a point between the two cones. The Starter will wave the start flag when the pole car starts the race.

OT19 ABORTED STARTS

- 19.1 The Clerk of the Course shall start the race at all time after the white flag has indicated that the race will start on the next lap and stop the race with the yellow flag if:
- 19.1.1 A competitor's vehicle stalls on the formation lap and he is not able to pull off the track with or without disadvantaging another competitor.
- 19.1.2 A competitor is adjudged to have jumpstarted.
- 19.1.3 The field is no longer bunched or in formation as they approach the start line.
- 19.1.4 The pole position competitor failed to slow on the approach to the corner prior to the start.
- 19.1.5 A competitor accelerated prior to the start of the race.
- 19.2 The Clerk of the Course shall immediately invoke the safety flag procedure. While the race is in this state he / she 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. 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.
- 19.3 The 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.
- 19.4 The competitor shall not receive any outside assistance, other than push starting.
- 19.5 The 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.
- 19.6 No re-fuelling shall be permitted.
- 19.7 Vehicles that need to be pushed to the infield for whatever reason shall only be pushed by officials or vehicles authorised to do so.

- 19.8 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.

OT20 PUSH STARTING PROCEDURES – CLUTCHLESS VEHICLES ONLY

- 20.1 The competitor must be seated at the wheel of his vehicle throughout the push start operation.
- 20.2 Due care shall be taken while pushing assistance is being given and all instructions given by officials shall be obeyed immediately.
- 20.3 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.
- 20.4 All competitors shall be obliged to arrange their own push vehicles, unless the SR's indicate that the organiser will provide these.
- 20.5 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.
- 20.6 A vehicle that is not able to start within one complete lap of the circuit shall be deemed a non-starter. If a vehicle starts and then stops, five (5) minutes repair time will apply.
- 20.7 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.
- 20.8 Vehicles may be pulled onto the track with straps or ropes but may not be started in this manner.
- 20.9 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.
- 20.10 Should the same vehicle spin for a third time in a race it will not be restarted but will be pushed to the infield.
- 20.11 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.
- 20.12 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.
- 20.13 Push starting under full course yellow flags or on restarts is not regarded as outside assistance.
- 20.14 These regulations apply equally to the micro-midget class where the competitor's crew would be responsible for push starting.

OT21 WET RACES

- 21.1 The provisions of circuit racing SSR 44 do not apply. Instead the Clerk of the Course and the Stewards shall determine the procedure to apply.
- 21.2 When the race is declared a wet race, or if the track is wet, competitors must start in single file formation.

OT22 RACING UNDER THE YELLOW FLAG (SAFETY STATUS RACING)

- 22.1 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.
- 22.2 This rule shall not be implemented if a car has spun off and poses no threat for another. 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.
- 22.3 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.
- 22.4 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 OT41.
- 22.5 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.
- 22.6 Once the field has reduced speed the start line officials shall signal the leader's number by holding the number alongside a stationary yellow flag. 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 off the track if the car does not want to start.
- 22.7 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 / she 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.
- 22.8 The operation of the green flag shall be the same as for the start procedure except that a cone shall be placed on the exit of the turn to indicate the point at which the race will be restarted by the Starter.
- 22.9 Should the marshals be unable to remove the obstacle from the track the Clerk of the Course shall stop the race.
- 22.10 The laps completed under yellow will count towards the total number of laps that should have been run.
- 22.11 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 three (3) laps or two (2) minutes.
- 22.12 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.

- 22.13 Clutchless vehicles (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. The 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.

OT23 STOPPING OF RACES

- 23.1 A 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.
- 23.2 Officials shall do so only after considering all other options available to them. The decision to stop a race shall not be taken lightly.
- 23.3 The Clerk of the Course shall also stop a race if the driving regulations compel him / her to do so. The Clerk of the Course has the sole right to stop a race in this case.
- 23.4 The 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.
- 23.5 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.

OT24 GENERAL RACE REGULATIONS

- 24.1 Any 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.
- 24.2 If 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.
- 24.3 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. No passengers are allowed on the back of push vehicles.
- 24.4 All 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.
- 24.5 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.
- 24.6 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.

OT25 DRIVING REGULATIONS

- 25.1 A 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.

- 25.2 A competitor who is found to be responsible for an accident / incident outside the scope of the applicable driving regulations shall have disciplinary action taken against him / her by the Clerk of the Course.
- 25.3 No competitor may deliberately block another competitor by driving next to each other for more than one lap. The blue flag shall be applied on the first lap and a black flag shall be applied by the second lap.
- 25.4 Competitors are expected to assist in the orderly conduct of races that need to be restarted after being stopped 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 the lapped competitor's race classification.
- 25.5 Manoeuvres 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 are strictly prohibited. Manoeuvres that have the clear intention of being unsporting shall be penalised.
- 25.6 No competitor may change direction more than once down the straight.
- 25.7 When a competitor leaves the track while competing he / she shall immediately bring his / her vehicle under control and re-join the place where he / she left the race when it is safe to do so. No advantage must be gained over the other competitors, nor may he be disadvantage any other competitor upon re-joining.
- 25.8 The tarred section of the track alone shall be used by the competitors during the race. A competitor passing the finish line with no wheels on the tarred section of the track, will not be seen to have crossed the finish line.
- 25.9 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 the 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.
- 25.10 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 excluded. 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. If the damage cannot be repaired and that competitor cannot race for the rest of the event, the competitor causing the damage must be excluded for the whole event, even though he / she was already placed at the back of the grid for the race where he / she caused the damage.
- 25.11 A competitor who need to draw attention to a problem, may proceed to draw the attention of race officials and shall do so prior to coming under Starter's orders – 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 / she may address a situation where a race official has placed him / her in slot 4 instead of his / her 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.
- 25.12 No competitor may bring his / her vehicle to a stop on the circuit to have race officials address any grievance he / she 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 procedure set out in these regulations.

- 25.13 In various places in the driving related regulations reference is made to the inside or outside as it relates to the vehicles. Over and above the plain meaning of the words relating to whether or not something is inside or outside something in 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.

OT26 DRIVING STYLES

- 26.1 There is only one distinct driving style of racing on tar ovals namely – non contact.
- 26.2 The SR's shall stipulate the driving style permitted for the event. The organisers has the right to determine the driving style but is not empowered to overrule National Championship Regulations.
- 26.3 The following definitions apply to the words used to describe what is permitted and not permitted.
- 26.3.1 "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.
- 26.3.2 "Shunting" shall mean the force required to move a leading competitor off his / her chosen racing line but shall not be forceful enough to cause him / her to lose control of his / her vehicle, spin out, or come into contact with the safety wall or barriers.
- 26.3.3 "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.
- 26.3.4 "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 / her 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 / her place. When the attempt at spinning is not immediately successful the competitor attempting the spin shall back off.
- 26.3.5 "Passing manoeuvre" shall mean the coming together of vehicles caused by one competitor passing or attempting to pass another competitor. A "passing manoeuvre" shall not include "bumping", "shunting" or "spinning off".
- 26.3.6 "Accident" shall mean a racing incident / collision between one or more vehicle and or any structure on the track.
- 26.3.7 "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.
- 26.4 The following applies to **all styles** during the **first lap**:
- 26.4.1 The non-contact rules will apply and passing manoeuvres are permitted.
- 26.4.2 An accident / incident that causes a disadvantage to other competitors, will automatically cause the race to be stopped and restarted.
- 26.4.3 If a competitor is spun out by another competitor the race will be restarted.
- 26.4.4. 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.

- 26.4.5 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. OT19 and OT20 above apply.
- 26.4.6 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.
- 26.5 After the first lap all racing shall proceed in accordance with the general regulations in OT25 above as read with the regulations applicable to overtaking and lapping set out in OT27. Further racing shall be strictly in accordance with one of the non-contact driving style mentioned above and set out in detail below.
- 26.6 Where a competitor's car is damaged in a first lap incident, the Clerk of the Course at his discretion may allow the competitor 5 minutes repair time.
- 26.7 The following applies to **non-contact** racing:
- 26.7.1 Only non-contact passing manoeuvres are permitted.
- 26.7.2 A competitor may not maintain contact with or push a vehicle in front of his / her own during a race.
- 26.7.3 No contact will be permitted.
- 26.7.4 The Clerk of the Course shall exclude competitors who spin other competitors off.
- 26.7.5 Once another competitor has the nose of his / her car past your door post (B-pillar) in a race, it should be accepted that he / she has passed you and you may not interfere with him / her until you both have passed the next corner.
- 26.7.6 No contact, bumping or shunting is permitted at the end of the straight upon entering the corner. Passing manoeuvres and non-contact shall however be permitted.
- 26.7.7 No contact is permitted going into corners.
- 26.7.8 Unsporting spinning off is not permitted. Unsporting spinning off is defined as and is punishable with exclusion and / or load up instruction:
- a) Deliberate spinning off where the competitor executing the spin is clearly able to outrace the competitor being spun.
 - b) Situations where attempts to spin have not been successful and the competitor attempting the spin continues to push the competitor ahead of him / her, especially when the pressure is being exerted on the body, between the front and rear wheels (as opposed to the usual contact area of the rear fender area).
 - c) Pushing the competitor into the barrier walls / fence.

OT27 OVERTAKING AND LAPPING

- 27.1 The following shall apply to overtaking:
- 27.1.1 The leading competitor may not change direction more than once down the straights. The leading competitor shall stay either on the inside or outside once he / she has passed the demarcation line going into the corner.
- 27.1.2 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.
- 27.1.3 Overtaking, according to the possibilities of the moment, may be done on the inside or outside.

- 27.1.4 When a competitor has been passed in a corner, he / she will not interfere with the competitor who has passed him / her down the first straight they encounter. The passed competitor may challenge for the lead within the ambit of these rules from the next corner.
- 27.1.5 When a competitor has been passed down a straight, he / she will not interfere with the competitor who has passed him / her going into the first corner they encounter. The passed competitor may challenge for the lead within the ambit of these rules from the next corner.
- 27.1.6 If the passing competitor is on the outside the competitor being passed must adjust his / her race line when he / she exits the corner so that the passing competitor has sufficient space on the clear race line to pass down the next straight.
- 27.1.7 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 / she may not turn in on the passing competitor.
- 27.2 The following shall apply to races being held up unnecessarily:
 - 27.2.1 The competitor who is holding up the race unnecessarily shall receive the blue flag. A competitor deliberately holding other competitors up by stretching the distance between the front and rear competitors shall be sent to the back of the grid. Officials must not start a race if the field is unnecessarily drawn out by a competitor.
 - 27.2.2 Such competitor shall race his usual race line and refrain from defensive tactics.
 - 27.2.3 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.
- 27.3 The following regulations shall apply to the lapping of another competitor:
 - 27.3.1 If a competitor is about to be lapped, he / she shall receive the blue flag to indicate that he / she is about to be lapped.
 - 27.3.2 Any competitor who does not take notice of the blue flag, may be penalised by the Clerk of the Course. Systematic or repeated offences may result in exclusion from the race.
 - 27.3.4 The competitor being lapped shall not interfere with or obstruct the faster competitor at all.
 - 27.3.5 If the passing competitor is on the outside the competitor being passed must adjust his / her race line when he / she exits the corner so that the passing competitor has sufficient space on the clear race line to pass down the next straight.
 - 27.3.6 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.

OT28 REPAIRS AND MAINTENANCE

- 28.1 The Clerk of the Course, at his discretion, may allow a competitor 5 minute repair time for a first lap incident. Other competitors may not circulate the track while 5 minute repair time is allowed to a competitor, they will stop at the start line. All repairs to take place on the track side of the pit gate.
- 28.2 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 pipe and the like during a race. This is considered repairs and is not permitted. Mechanics and crew may not touch a race car on the track. No outside assistance is allowed.
- 28.3 The decision of the Clerk of the Course in instances such as these is final.

OT29 STOPPING OF A VEHICLE DURING THE RACE

- 29.1 The regulations does not apply to the situation where a competitor spins out, is spun out or loses control and bring his / her vehicle to a standstill momentarily to regain control.
- 29.2 A competitor wishing to leave the race shall signal his / her intentions in good time and is responsible for ensuring that the manoeuvre is carried out safely and as near as possible to the point of exit to the infield.
- 29.3 Apart from the competitor him / herself – and in exceptional cases, the competent officials, nobody is allowed to touch a stationary vehicle under penalty or exclusion from the race.
- 29.4 A competitor shall not push his / her vehicle along the track or push it across the finishing line, irrespective of his / her opinion about the safety of such step.
- 29.5 Any 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 Marshal.
- 29.6 Vehicles that have spun off or have stopped on the edge of the track must be removed to the inside of the circuit and if they are not able to continue racing in the particular race immediately.
- 29.7 No repairs may be carried out on the infield of the track.
- 29.8 The replenishment of vehicles on the track or infield is prohibited as the competitor has withdrawn and cannot benefit from any subsequent stoppage.

OT30 WITHDRAWAL AND RETIREMENT FROM A RACE

- 30.1 Competitors who are unable to participate in a race or event must inform the Paddock Marshal as soon as possible, stating their reason for withdrawal (refer GCR110 ii). They may be required to sign a form declaring such withdrawal / retirement.
- 30.2 Once a competitors / vehicle has retired or withdrawn from a particular race, he / it may not re-join that particular race.
- 30.3 Any 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:
 - 30.3.1 Be repaired to the satisfaction of the Chief Scrutineer or his appointed deputy.
 - 30.3.2 Be impounded until the time for protest, regarding driving conduct in the race concerned has elapsed.
 - 30.3.3 Removed from the track.
 - 30.3.4 A 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 must impound the vehicle.
 - 30.3.5 A competitor who withdrew from every race in the heats shall not be permitted to start the final race.

OT31 RESTARTING OF RACES THAT WERE STOPPED

- 31.1 If the first lap of the race has not been completed:
 - 31.1.1 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. The competitor causing the stoppage may be penalised.
 - 31.1.2 The race shall be considered a new race and the full amount of laps shall be run.
 - 31.1.3 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 assistance may restart the race. Under the discretion of the Clerk of the Course. Refer GCR273 and GCR274.

- 31.1.4 Classes that does not have clutches shall be allowed to push start.
- 31.1.5 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 OT 31.2 below.
- 31.2 If one or more laps have been completed by the leader:
 - 31.2.1 The race shall restart with the competitors in single file – see OT 31.7 below.
 - 31.2.2 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 as he may not be allowed to restart the race.
 - 31.2.3 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.
- 31.3 The 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 laps shall not be included in the number of laps to be run.
- 31.4 No refuelling, adjustments or replenishments will be allowed. Competitors are therefore urged to ensure that they commence races with sufficient fuel, oil and water.
- 31.5 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 race. Restart positions will be taken as per the relevant positions of competitors concerned, prior to the incident, with the guilty party having been excluded.
- 31.6 The Clerk of the Course may not declare the race complete. It must be restarted even if there is only one (1) lap to run, unless under exceptional circumstances.
- 31.7 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 (go back one lap). The competitor who caused stoppage shall forfeit his position on the track and shall be deemed to be the last on the 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 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 the third place on the track.
- 31.8 The lap scorers shall determine the positions as soon as circumstances permit and furnish them to the starter without delay.
- 31.9 Clutchless vehicles (midgets) may be push started. All the vehicles in all other classes should be fitted with a clutch and be able to start with the 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 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.

OT32 DETERMINATION OF THE FINISH OF A RACE

GCR 272 applies.

OT33 NUMBER OF LAPS AND THE NUMBER OF COMPETITORS IN RACES

33.1 For Club and Regional Championship events refer to the relevant Club and Regional Regulations.

33.2 Guidelines for National Championship events:

33.2.1 Maximum recommended number of starters in the final - 26.

33.2.2 A guideline for the maximum number of laps in any heat is two more than the number of vehicles that started the race and 5 more in the final.

33.2.3 The following is a guideline for the maximum number of laps in the final:

- a) If less than the recommended number of competitors start, at least five (5) more than the number of vehicles that started the race.
- b) If the recommended number or more competitors started the race, twenty (20) laps.

OT34 SCORING

34.1 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.

34.2 Where a point penalty is incurred the original points penalty immediately. 3 points is the norm. The following abbreviations shall be inserted on the result sheets:

34.1.1 **DNS** - To indicate 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.

34.1.2 **DNF** - To indicate a competitor did not finish a race due to a breakdown or as a result of his own decision to withdraw from the race.

34.1.3 **WD** - To indicate a competitor withdrew from a specific race.

34.1.4 **WE** - To indicate that the competitor withdrew from the event.

34.1.5 **DNA** - To indicate a competitor who had entered for an event and did not arrive for the event.

34.1.6 **OD** - To indicate that a competitor was halted by the Clerk of the Course due to a perceived dangerous defect on his vehicle.

34.1.7 **RD** - To indicate that a competitor did not complete a race due to race damage sustained.

34.1.8 **EXR** - To indicate that a competitor was excluded from the race.

34.1.9 **EXE** - To indicate that a competitor was excluded from the event.

34.1.10 **PP (n) – x** - To indicate that the competitor received a point's penalty. The "n" denotes the race in which the penalty was incurred and the "x" denotes the amount of points to be deducted. This annotation shall be made in the margins alongside the competitor's name.

34.3 Regional Championship

The following point scoring system will apply to all classes at Regional events:

1st	-	15 points	5th	-	8 points
2nd	-	12 points	6th	-	7 points
3rd	-	10 points	7th	-	6 points
4th	-	9 points	8th	-	5 points, etc.

34.4 National Championship

The following point scoring system will apply to all classes at National events:

1st	-	15 points	5th	-	8 points
2nd	-	12 points	6th	-	7 points
3rd	-	10 points	7th	-	6 points
4th	-	9 points	8th	-	5 points, etc. With all finishers scoring a minimum of 1 point.

OT35 CLASSIFICATION OF A FINISHER

- 35.1 For a competitor to be classified as a finisher, he must cross the finish line with all four wheels on the racing surface and with his vehicle running under its own power and receive the chequered flag. No outside assistance is allowed.
- 35.2 A competitor who does not cross the finish line with all four wheels on the racing surface, will be scored after the last competitor who crossed the finish line with all four wheels on the racing surface.
- 35.3 A competitor who is spun or bumped off the track on the last lap, in contravention of the rules, shall be reinstated where he / she 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.
- 35.4 The provision 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.
- 35.5 Where there is a time constraint, the results will then be determined as per OT 35.5.1 and OT 35.5.2. Competitors will be classified according to:
- 35.5.1 Firstly, the number of laps that they completed.
- 35.5.2 Secondly, the order in which they passed the start / finish line for the last time before the incident / accident. The competitor causing the stoppage will not score any points. Such competitor will also be restarted behind the last competitor in the race.
- 35.6 When 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.

OT36 DEAD HEATS AND TIES

- 36.1 Competitors 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.

- 36.2 In 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. An award will be shared.
- 36.3 A tie in respect of qualifying will be broken by reference to the second and then third best times. If the tie still persists, preference will be given to the competitor who posted the time first.
- 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 both the first two heats of the event. If 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. If this does not resolve the tie, the competitors shall draw.
- 36.5 A 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.

OT37 POST EVENT PROCEDURE

- 37.1 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.
- 37.2 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.
- 37.3 The results of an event shall be posted upon the notice board, or such other place as described in the SR's, for a period of thirty (30) minutes.

OT38 COMPLIANCE WITH ENGINE, FUEL AND WEIGHT SPECIFICATIONS

- 38.1 The provisions of GCR 254 shall apply.
- 38.2 The 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.
- 38.3 The capacity of an engine shall be limited to the measurement of the bore and stroke only. The method of 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.
- 38.4 Where 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 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 MSA. 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 as per GCR's apply.
- 38.5 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 GR 240. All competitors must declare any additives added to their fuel on entry of the event venue when signing on.

- 38.6 The 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:
- 38.6.1 The swapping procedure shall take place in a controlled environment and may, notwithstanding any regulation to the contrary be conducted on the infield of the circuit.
 - 38.6.2 The competitor shall drain all fuel from his / her vehicle under the supervision of a duly appointed official.
 - 38.6.3 The organiser shall have a supply of fuels complying with these regulations as well as any permitted additives available.
 - 38.6.4 The competitor should inform the Clerk of the Course as to what additives he added to his fuel beforehand.
 - 38.6.5 The competitor shall be entitled to elect whether or not he / she wishes the drained fuel to be bottled for testing purposes at the time of draining and shall be barred from exercising his / her right to have the fuel tested if he / she does not make such an election at this point.
 - 38.6.6 All details of the procedure shall be properly documented and countersigned by the official and the competitor concerned.
 - 38.6.7 The competitor shall be liable for the reasonable cost of the fuel and additives supplied and non-payment of these costs shall constitute sufficient grounds for the refusal of the entry of the competitor from the next or similar event.
 - 38.6.8 The competitor shall also be entitled to recover the fuel or balance of the fuel drained from his vehicle as the case may be.
- 38.7 In respect of compliance with the minimum weights the following:
- 38.7.1 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.
 - 38.7.2 All checking shall be done on the authority of the duly empowered race officials only and shall be properly supervised and recorded.
 - 38.7.3 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.
 - 38.7.4 Competitors who claims 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 weight 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.
 - 38.7.5 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.
- 38.8 The provisions of GCR 256 in respect of incidental findings shall apply.
- 38.9 The scales provided by the organisers on the day will be accepted as correct and will be the norm for the day. All vehicles must comply to the required weight of their respective classes on the day.

OT39 FIRE EXTINGUISHERS

- 39.1 A minimum of sixteen (16) fire extinguishers shall be available for use on track before the start of an event.
- 39.2 The extinguishers shall all be certified and in working order. The extinguishers utilised shall be of the stored pressure type containing ABC powder, and shall have a minimum capacity of 9kg. The extinguishers shall furthermore be serviced by an SABS approved service provider and shall bear proof of such service.
- 39.3 These shall be positioned as follows, 2 in the pits, 1 at each corner (4 in total) and 2 in the centre of the track. The remaining extinguishers shall be on board a rescue or recovery vehicle to facilitate swift deployment.
- 39.4 Circuits that have separate pit areas, at opposite sides of the track, for different classes of vehicles, shall be required to place two (2) extinguishers in each such pit area as well. The amount of extinguishers required shall also increase accordingly.
- 39.5 Extinguishers used during the event shall be replaced from reserve supplies before the event may continue.

OT40 RECOVERY VEHICLES

- 40.1 A minimum of two (2) breakdown vehicles, well equipped with a suitable drag-off rope / line, must be in attendance at all times.
- 40.2 These vehicles shall be equipped with properly mounted push bars set up at the mid-point of the midget class rear bumper.
- 40.3 For Regional or National events, the above requirement shall be increased to three and must remain as such for the complete duration of the event.

OT41 PENALTIES

- 41.1 Any breach of these regulations, the GCR's, the SR's and any relevant Club or Regional Regulations for any competition shall be penalised by the appropriate official whether or not any penalty is specified for such breach.
- 41.2 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:
 - 41.2.1 A reprimand
 - 41.2.2 A points or time penalty
 - 42.2.3 The amendment of the classification with the culprit being moved down the classification.
 - 42.2.4 A fine up to a maximum of R10 000
 - 42.2.5 The exclusion of a competitor
 - 42.2.6 A load up instruction – which requires the competitor, his family and crew to leave the venue.
- 41.3 The penalties listed below shall be imposed by the Clerk of the Course once it has been established that a competitor has contravened these regulations. The Clerk of the Course may in addition fine the competitor or request further action by the Stewards or MSA if the circumstances warrant same. The penalties are:

RULE NO	OFFENCE	PENALTY
	(As detailed below or in applicable rules)	(To be applied – subject to the applicable rules)
41.3.1	Failing to present a vehicle for scrutiny or attending to documentation.	Exclusion from the event.
41.3.2	Failing to present a vehicle for scrutiny or attending to documentation within the required time.	Placement at the back of the grid for heats not determined by the results of other heats.
41.3.3	Failing to attend drivers briefing.	Exclusion from the event or placement at the back of the grid for heats not determined by the results of other heats.
41.3.4	Contravention of regulations concerning race wear.	Exclusion from the race concerned, increasing to exclusion from the event.
41.3.5	Ignoring flags deployed by the Clerk of the Course.	Placement at the back of the grid of the race concerned to exclusion from the race or event for repeated or serious offenders.
41.3.6	Pushing or driving a vehicle in a direction other than in the direction of the course during racing or practice.	Exclusion from the race or event.
41.3.7	Changing drivers or permitting other persons to race his / her race car.	Exclusion from the event.
41.3.8	Passing another competitor on the assembly lap, jumpstarting, failing to slow down into the last corner or not maintaining formations lap prior to the start.	Placement at the back of the grid of the race concerned to exclusion from the race or event for repeated or serious offences.
41.3.9	Assuming incorrect grid position.	Placing at the back of the field.
41.3.10	Failure to be seated at the wheel throughout the whole time a vehicle is being push started.	Placement at the back of the grid of the race concerned to exclusion from the race or event for repeated or serious offences.
41.3.11	Failure to obey an official instruction while vehicle is being push started.	Exclusion from the race or event.

RULE NO	OFFENCE	PENALTY
	(As detailed below or in applicable rules)	(To be applied – subject to the applicable rules)
41.3.12	Passing another competitor whilst under safety (yellow flag) or not complying with safety flag regulations.	Placement at the back of the grid of the race concerned to exclusion from the race or event for repeated or serious offences. The offending competitor may be placed behind the aggrieved competitor in the classification. The offending competitor may also be placed in the position he held at the time of the offence.
41.3.13	Being responsible for an incident that causes a race to be run under caution or stopped.	Placement at the back of the grid of the race concerned to exclusion from the race or event for repeated or serious offences.
41.3.14	Unauthorised replenishment of vehicles on the infield or track or carrying out repairs on the track.	Exclusion from the race.
41.3.15	Being responsible for damage to another competitor that rendered that competitor unable to participate or compete further in that race or the event.	Placement at the back of the grid of the race concerned to exclusion from the race or event if the other competitor is unable to participate further and the actions were found to be contrary to race regulations.
41.3.16	Responsibility for an accident in the first lap that leads to a stoppage of the race.	Placement at the rear of the grid and exclusion for continued offences of the same type.
41.3.17	Spinning off of a competitor during the race when not authorised in the rules or spinning off outside of the spinning zone.	Placement at the back of the grid of the race concerned if the race is still being run. When the race is complete a penalty ranging from the amendment of the classification so that the culprit is placed behind the aggrieved competitor to exclusion from the race or event for repeated or serious offences.

RULE NO	OFFENCE	PENALTY
	(As detailed below or in applicable rules)	(To be applied – subject to the applicable rules)
41.3.18	Disorderly conduct during a race or the contravention of driving regulations.	Placement at the back of the grid of the race concerned if the race is still being run. When the race is complete a penalty ranging from the amendment of the classification so that the culprit is placed behind the aggrieved competitor to exclusion from the race or event for repeated or serious offences.
41.3.19	Allowing a party other than the competitor or authorised official touching a competing vehicle during a race.	Placement at the back of the grid of the race concerned, if the race is still being run. If the offence is brought to the attention of officials after the completion of the race – exclusion.
41.3.20	Pushing a competing vehicle across the finish line or along the track.	Exclusion from the race.
41.3.21	Failure to furnish the Clerk of the Course with an incident report.	Exclusion from the race.
41.3.22	Contravention of technical regulations or specifications where an advantage is gained. Refer to 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. Further penalties may be applied as per GCR 176 (i) (b).
41.3.23	Contravention of technical regulations or specifications other than engine limitations and fuel specifications where an advantage is not gained. Refer GCR 176 (i) (a) and (b).	A fine of not less than R750
41.3.24	Refusal to subject a vehicle to post event scrutiny or failure to strip a vehicle when so instructed or failure to provide fuel samples or to swap fuel when so instructed.	Exclusion from the event.
41.3.25	Utilising an unmarked or illegal tyre(s).	Exclusion from the event.
41.3.26	Having consumed alcohol or other illegal substances.	Exclusion from the event.

RULE NO	OFFENCE	PENALTY
	(As detailed below or in applicable rules)	(To be applied – subject to the applicable rules)
41.3.27	Disorderly conduct as set out in GCR 172. This includes disorderly conduct by the entrant or his pit crew.	Load up instruction and may be referred to MSA for further action.
41.3.28	Forcing a yellow or red flag.	Placement at the back of the grid. Upon completion of the race a hearing to establish the facts. If guilty – load up instruction.
41.3.29	Displaying or pointing a fire arm anywhere on the premises.	Exclusion from the event and may be referred to MSA for further action.

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.

- 41.4 The Clerk of the Course or the shall be entitled to impose a penalty for technical infringements.
- 41.5 The 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 a black flag and warn him by means of the black and white flag without the need for a hearing where this sanction is called for in the start and race regulations.
- 41.6 The 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 to 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 when he is advised of the competitor's intention to protest that decision.
- 41.7 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.
- 41.8 The 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.
- 41.9 The penalty for failing to attend competitors briefing may only be imposed if such a briefing is specified in the SR's for the event.
- 41.10 Any penalty under these regulations shall not prevent any further appropriate action by MSA. 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

MSA unless the ability of the official who could or would not deal with the incident is not also investigated by MSA.

- 41.11 All penalties imposed by the Clerk of the Course shall be posted on the notice board as soon as possible after the hearing with the competitor concerned.

OT42 PROTESTS AND APPEALS

Refer to part IX and X of the MSA Handbook.

OT43 RESERVED

OT44 VIDEO FOOTAGE

In 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. Therefore competitors must declare their intention to use a camera on their entry form and must make all camera footage available to officials on demand.

OT45 DECISIONS OF THE OFFICIALS

- 45.1 Given the nature of the sport officials have to decide potentially contentious issues within split seconds, without the luxury of replays and often event without video footage. Hence any decision made by the officials shall be deemed to be in good faith. 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 this as part of the sport just as many other sporting codes have to do.
- 45.2 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 not 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 an offending competitor.

OT46 RESERVED

OT47 DOCUMENTATION

Post event documentation should be forwarded to MSA on the Monday after the event. All fees related for any event shall be paid over to MSA by the Monday after the event. Late submission of documentation is subject to a fine by MSA.

OT48 RESERVED

REGULATIONS APPLICABLE TO OVAL TAR RACING

PART 2 GENERAL VEHICLE CONSTRUCTION APPLICABLE TO ALL CLASSES

CR1 DEFINITIONS

- 1.1 The only GCR's that apply to the interpretation of these class and construction regulations or the duties of officials and competitors in respect there to are **GCR's 226, 245, 249, 255, and 257.**
- 1.2 Throughout these class regulations there will be reference to different types of engine builds being:
 - 1.2.1 The **stock** engine – which means that all the parts in the engines shall be standard or generally accepted replacement parts for stock vehicles;
 - 1.2.2 The **modified** engine – which means that the parts utilized may at the discretion of the competitor be either standard or race parts
 - 1.2.3 The **open** engine – which as the name implies means that there are almost no restrictions to the manner in which the engine is built.
- 1.3 The regulations also refer to differing vehicle construction as follows:
 - 1.3.1 **Original road going vehicle** – these vehicles are ordinary road going vehicles that have been converted to race cars. The key element of this type of vehicle is that the suspension pickup points have not been altered or connected to any of the roll cage pipes;
 - 1.3.2 **Semi-space frames** – these vehicles are original road going bodies that have evolved to a point where the suspension pick up points have been altered or where these points are connected to the roll cage pipe work. Included in this class of vehicle is the front wheel drive body shell that has been made rear wheel drive;
 - 1.3.3 **Space frames** – these are purpose built racing chassis; and
 - 1.3.4 **Open wheelers** – these are purpose built chassis designed for open wheel racing.
- 1.4 The regulations will refer to the following types of body shells:-
 - 1.4.1 **Stock bodies** – this means that the vehicle must be clearly recognizable as an original road going vehicle as the rear fenders, roof, all fender walls; bulk heads and roof pillars must still be present;
 - 1.4.2 **Replica bodies** – this means that the whole body or sections thereof may be replaced with a moulded copy of a vehicle. These are typically used with space frames;
 - 1.4.3 **Plated bodies** – these vehicles are also typically space frames and have flat metal sheet or other materials as permitted in their class regulations fitted to cover the frame. These vehicles typically present in a wedge design; and
 - 1.4.4 **Open wheel bodies** – these vehicles have a cover over the engine bay and a separate cover over the rear fuel tank area. The side of the vehicles are usually plated.
- 1.5 The following applies in respect of the type of part that may be used:
 - 1.5.1 **Purpose made parts** – these parts are those that the competitor makes himself or has made.
 - 1.5.2 **Race parts** – these parts are made specifically for racing.
 - 1.5.3 **Standard parts** – these are original equipment or generally accepted, commercially available, proprietary branded, replacement parts, which specifically excludes any purpose made or racing parts. These parts may be further limited to:-
 - 1.5.3.1 **Vehicle specific standard parts** – which mean that parts specified for the particular make of vehicle or engine must be used;

- 1.5.3.2 **Brand specific standard parts** – which mean that parts specified for the particular brand of vehicle or engine may be used. By way of example this means that any component from any Ford may be used in a Ford.
- 1.5.3.3 **Class specific standard parts** – means that any part which in its own right would qualify as a standard part may be used. These parts are used when for instance the regulations specify that the choice of brakes is free with in the general choice restrictions of the class.
- 1.6 Throughout these regulations frequent reference is made to fiberglass. The term “fibreglass” must be regarded as a collective word for all forms of suitable composite materials, including carbon fibre and Kevlar™.
- 1.7 Throughout these regulations references is made to sheet metal. Aluminium sheet may also be used instead of metal sheet.
- 1.8 Throughout these 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 clock wise direction.

CR2 NUMBERS, NAMES, MARKINGS, ADVERTISING AND SLOGANS ON VEHICLES / PAINTING OF VEHICLES

2.1 **Please also refer to GCR's 246 to 249.**

2.2 **Numbers:**

- 2.2.1 Competitors must realize that the number is the primary means of identification in respect of scorers, officials, fellow competitors and the spectator. A look at any track will reveal many similar looking and similarly painted vehicles – only the numbers are unique. Competitors should strive towards making the number a feature of their vehicle.
- 2.2.2 Vehicles will be identified by means of a number as per the National number system. There will be no venue prefix to reflect the competitor's registered home base. MSA will administer the competitor numbers and all drivers must comply with the MSA number system,

NOTICE NATIONAL NUMBERING SYSTEM

EXPLAINED

NN1 The objectives of the system are:

- 1.1 To create a unique race number for each competitor;
- 1.2 To aid competitors in creating awareness about themselves;
- 1.3 To assist event officials by removing duplicate numbers and there by potential errors and
- 1.4 To assist commentators and the public by improving the identification of the competitor.

NN2 The numbers remain allocated to a competitor as long as he or she races.

- 2.1 Where the competitor becomes an SA champion (ends second or third in the series) the race number will remain allocated to him even though he is entitled to use the SA number.
- 2.2 The number will remain allocated to a competitor for 13 months after his license expires.
- 2.3 Competitors may buy and sell numbers amongst each other. In this case written proof of purchase must be submitted.
- 2.4 MSA may declare certain numbers off limits either permanently or for a period in honour of competitors who may have passed away or retired. Example :(**Number 0 is reserved in memory of Johan Roos**).

- 2.5 Should an existing competitor move to another class he may take his number into that class if it is open in that class. Where a competitor participates in more than one class he will be required to have a single number in all the classes and will be reallocated a number.

NN3 Numbers are allocated as follows:

- 3.1 It is recorded that there has been a process whereby competitors who have achieved success in the sport have been given preference. This process is now complete. From now onwards it is first come first served.
- 3.2 As stated, competitors who are already on the National Number data base who continue to compete in the same class or classes will automatically be reallocated their number on a year by year basis.
- 3.3 New competitors as well as those whose information is not yet on the data base should contact the Numbers administrator by following the relevant links on the MSA website.
- 3.4 The number selected will be reserved for 14 days in order to allow the competitor to obtain his license. There after the number will be free.

NN4 The number system is being unified as follows:

- 4.1 When one of the drivers cease competing or fails to renew his license the number in that class will be closed. This process will continue until each number is used only once.
- 4.2 New numbers are allocated to a driver and are immediately closed to all other classes.

CR.2.2.3 Numbers shall be positioned as set out in the relevant class regulations. Should the number not be visible to the lap scorer – the competitor would not be scored.

2.2.4 There are two definite styles of numbering permitted being:

- 2.2.4.1 The typical USA / UK oval racing style where the numbers are very stylish and very large on the door panels of the car. The numbers are applied directly on to the bodywork. These numbers shall always be of contrasting colours and be highly visible in the prevailing race conditions and light conditions.

2.2.5 The minimum dimensions of the numbers area's follows:

- 2.2.5.1 When applied directly on the body work – **400mm** high with a stroke of **75mm**;
- 2.2.5.2 When applied onto a back ground colour the end plate of awing – **300mm** high with a stroke of **50mm**;
- 2.2.5.3 On the sun visor panel or front wing (specific to open wheelers) – As large as the dimensions will allow.
- 2.2.5.4 The size of the pre fix is free.

- 2.2.6 All numbers shall be in position when the vehicle is presented for scrutiny. Modifications may be required because of observations made by the lap scorers. Numbers shall be placed on the section of the body that is mainly vertical. This means that numbers should not be applied on wheel arches and other similar rounded areas. The number should be visible to the public and the crowd from a position on the ground as well as in the stands.

2.2.7 The South African Champion or the National Class champion shall carry the number "SA 1" on his vehicle. The competitors who finished second and third in the National Championship Series shall carry the numbers "SA 2" and "SA 3" on their vehicles.

2.2.8 The numbers 1, 2 and 3 may not be used outside of the above regulations. No number that would create the impression that the competitor is a champion may be used. It follows that for instance the number 0, 1, 2 and 3 cannot be used under any circumstances. No zero's may be placed in front of any competitors number. The number 0 should normally refer to the pace car. No other numbers are to have the prefix S.A or Z.A. on a car.

2.2.9 No cars displaying ZA numbers will be allowed to race on any MSA event.

2.3 Names:-

2.3.1 The name and surname of the competitor shall be painted or sign written as follows:

- 2.3.1.1 Saloon vehicles – on to either the whole of the sun visor panel, or on the spectator side of the roof just above the door or on the replacement window panel in the rear door that faces the spectators.

- 2.3.1.2 Onto the lower, forward area of the end plate of open wheeled vehicles on the spectator side.
- 2.3.1.3 Dimensions of letters to be a minimum of 150 mm high with a 25 mm stroke.
- 2.4 Advertising, Logos and slogans:-
 - 2.4.1 The club logo may be added alongside the name.
 - 2.4.2 Advertising is permitted on all vehicles. The advertising shall not interfere with the numbers at all.
 - 2.4.3 In respect of advertising GCR 246, 247 and 248 apply.
 - 2.4. No rude or offensive logo's, signs, slogans, commentating or similar items/acts, are allowed.
 - 2.4.5 As a guide to competitors and officials the following:
 - 2.4.5.1 Swear words, even if disguised by as the risks and other symbols are regarded as rude;
 - 2.4.5.2 Any blatant reference to sex, the sexual act or the naked body shall be regarded as offensive;
 - 2.4.5.3 Any reference to race is offensive;
 - 2.4.5.4 Any reference that belittles or pokes fun at the belief or religion of another shall be offensive. It is however acceptable to state your own personal believes (irrespective of what that is).
- 2.5 Specific markings required:-
 - 2.5.1 Competitors using methanol as fuel shall display aluminous or a gedot, with a minimum diameter of 300 mm on both sides and on the roof of the vehicle. The wording "Me" or a black lightning bolt shall be printed on the dot. The letters or the bolt shall be at least 175 mm high and have a stroke of 30 mm.
 - 2.5.2 Rookie competitors in saloon classes will mount a 45 x 30 cm yellow flag to the middle of the boot lid. Rookie competitors in the open wheel classes will mount the flag into the top of the rear push bar. In the micro midget class the flag will mount on to the rear wing. In all cases the flag pole used shall have a suitable means of preventing the flag from becoming dislodged.
- 2.6 Vehicles shall be neatly painted and presented in an acceptable condition to the Scrutineers of an event. Competitors who are part of teams must ensure that steps, other than the numbers, are taken to differentiate between the teammates.

CR3 MIRRORS

- 3.1 Rear view mirrors are not permitted in open wheel classes. Rear view mirrors may be fitted to other classes but may not protrude outside the widest point of the vehicle. Mirrors may not exceed 300 cm².

CR4 WHEELS AND RIMS

- 4.1 Double wheels are not permitted. Hence all vehicles must have two front and two rear wheels only.
- 4.2 All wheel nuts shall be machined in order that the scrutineer can determine the length of the studs. All wheel nuts are to be fitted. The stud thread shall be in good order and when the nut is in place at least 100 % of the diameter of the nut or 20-mm of thread shall be engaged whichever is the greater. In cases where the wheel is fastened by a stud turned into the hub or drum the same regulations in respect of the engagement of the stud shall apply.
- 4.3 The width of the rim may not exceed the tread width of the tyre utilized with that rim. Officials and competitors should note that this measurement is taken where the tyre seats and is not the distance between the outside edges of the rim.
- 4.4 Bead lock rims are only permitted on open wheel vehicles and in the classes where they are specifically permitted. The introduction of bead lock rims in the open wheel and hotrod classes have created unforeseen problem in that the fastener on the lock rings have in many

cases been responsible for flat wheel sand / or rim damage for other competitors. Measures must accordingly be taken to address the problem. Hence it is necessary to introduce a regulation that compels the competitor who wishes to use lock rings to make the ring thick enough so that the head of the fastener can be counter sunk to a depth where it does not pose a threat to a fellow competitor. The head of the fastener used shall be counter sunk to at least 80 % of the depth of the head. The head shall be bevelled or chamfered.

4.5 Only steel and aluminium wheels would be allowed.

CR5 WHEEL SPACERS AND WHEEL ADAPTERS

- 5.1 Wheel adapters and spacers are permitted.
- 5.2 Wheel adapters must be made of steel and may not exceed 25 – mm in thickness.
- 5.3 Wheel spacers maybe made of steel or aluminium and shall be flat and have a maximum thickness of 65 - mm.
- 5.4 Adapters and spacers must be stepped to locate the wheel.
- 5.5 Both these parts may not be fitted to the same wheel simultaneously.
- 5.6 High tensile steel cap screws shall be utilized to replace wheel studs, a fix adapter, or fit the wheel if any form of spacer or adapter is used.

CR6 TYRES AND SUSPENSIONS

- 6.1 Tyres may not protrude beyond the wheel arch or body work in all saloon class categories.
- 6.2 Tyres other than slicks shall have a minimum of 2 mm of standard tread pattern visible and capable of measurement across at least 75% of the width of the tyre when submitted at scrutineering. Scrutineers shall refuse any tyre that has reach end the tread wear indicator.
- 6.3 All tyres and replacement wheels shall be presented unmarked at scrutineering and may be marked at scrutineering, if they comply with these regulations.
- 6.4 The tyre manufacturers original extruded side wall markings, indicating manufacturer's details, size, profile, country of origin, ratings, serial numbers and batch codes may not be removed or altered.
- 6.5 Any chemical treatments or any means to artificially enhance tyre performance is prohibited. Buffing or skimming is permitted. No grooving is permitted.
- 6.6 Where ever a class regulation refers to a tyre size, such tyre size shall be determined by reference to the extruded tyre markings made by the manufacturer and not physical measurement. Not with standing this regulation, a scrutineer or a technical representative shall be entitled to measure tyres for compliance with manufacturer's specifications. The only exception to this regulation is rethreaded tyres where the width of the rethreaded portion shall be measured for compliance with width regulations.
- 6.7 The tyre aspect ratio is free.
- 6.8 The use of nitrogen in tyres is permitted.
- 6.9 The following tyre types are, subject to the stipulations contained in the specific class regulations, available to competitors:-
 - 6.9.1 **Road legal tyres**, described as tyres which are designed for road going use in terms of accepted International standards. Any tyre that has an inscription specifying that it is only for competition use or is not permitted on highways is a race tyre and may not be used. It is brought to the attention of competitors that the commonly used "M + S" inscription relates to the tyre's performance in mud and snow and does not sign if ya race tyre. Please also note the tyres that only comply with the USA DOT certification are not considered road legal in South Africa and hence do not comply with this regulation.
 - 6.9.2 **Race tyres**, described as tyres manufactured by are cognized tyre manufacturer, which are designed for race use only. These tyres can be slick tyres for use on tar or treaded for use on dirt. Such tyres must be generally available to all competitors. Please refer to the specific class for details of the tyres that are permitted.

- 6.9.3 **Rethreaded tyres**, described as tyres, retreaded in the Republic of South Africa by recognized locally domiciled ret readers. These tyres shall comply with the relevant Traffic Act/SABS standards and be distributed to the general public for that purpose. It follows that such tyres must be generally available to the public at reputable commercial tyre dealers or retreaders. Imported casings are permitted. Race tyres may not be used as casings. These tyres are not permissible for tar events.
- 6.10 The regulators are concerned that certain competitors may achieve an unfair advantage by importing special tyres albeit that the tyres are road legal in the country of origin. This was never the intention of the rule. Competitors and officials are reminded that the choice of tyres is restricted to tyres that are available to the general public at the leading franchise tyre operations in South Africa. Hence if you need to place special orders for tyre or need to import them yourself you may not use the tyre. Tyres may not be skimmed.
- 6.11 Where a maximum tyre quantity is permitted the event regulations should specify when competitors become locked in to the tyres, failing which it is at scrutineering of the car.

CR7 SUSPENSION / RIDE HEIGHT

- 7.1 **Suspension** design is free subject to class regulations.
- 7.2 Coil and leaf spring rates are free in the classes where they are allowed. (Not in Stock Rods).
- 7.3 Front and or rear strut towers may be braced from one front strut other opposite strut. (Not in Stock rods).
- 7.4 **Ride height may** be made adjustable by using a threaded pipe to adjust the spring saddle.
- 7.5 Ride height is free. Vehicles are not permitted to scrape on the track at any time including cornering and braking. A vehicle that causes sparks due to being too low shall be stopped by the race officials.

CR8 EXHAUST & SILENCER

- 8.1 The exhaust pipe shall be securely fitted to the vehicle and shall preferably be mounted above the floor pan of the vehicle to avoid the loss thereof.
- 8.2 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.
- 8.3 Vehicles that have the exhaust below the floor pan shall fit saddles to the front and rear of the vehicle to retain the **exhaust system** should it break or fail in any other manner. Material to be 25 mm wide and 3 mm thick metal. Saddles are to be properly bolted to the vehicle.
- 8.4 Competition **exhaust manifolds** are permitted where the class rules allows it.
- 8.5 Exhaust tailpipes passing out the side of the car may only do so at a maximum height as measured from the top of the pipe to the floor. This height is 500 mm on tar cars. This rule is clarified to mean that the maximum height of the exhaust is reflected in the rule. It may be lower than the height. It may also not point to the face of another competitor.
- 8.6 All race cars, other than sprint cars, must be fitted with a silencer. The silencer should have a perforated pipe between the front plate and the back plate of the silencer box. Noise may not exceed 109 Db measured 1 meter above ground level at the starters box with the vehicle passing by at full speed notwithstanding the fact that the cars must comply with the rules as set out in the MSA environmental requirements. Competitors racing in Cape Town are restricted to 105Db.

CR9 BRAKES

- 9.1 Effective braking is mandatory on all 4 wheels of saloons. For open wheelers please refer the specific class regulations.
- 9.2 Only driver operated brake balance / bias adjustment systems are permitted.
- 9.3 ABS is not permitted in any class.
- 9.4 Copper brake lines or pipes are not allowed.

9.5 Pedal boxes are free.

CR10 TRANSMISSION

- 10.1 Only two-wheel drive is permitted.
- 10.2 Differentials may be locked.
- 10.3 No sequential gearboxes or traction control systems are allowed in not allowed in the class rules.
- 10.4 Clutch driven plates are free. All saloon cars must be fitted with a working clutch.

CR11 CARBURETION/ FUEL INJECTION/ IGNITION

- 11.1 The use of Nitrous oxide or water injection is not permitted.
- 11.2 Swirl pots / anti surge tanks are permitted, provided that they in no way aid fuel cooling.
- 11.3 No fuel cooling whatsoever is allowed.
- 11.4 Fuel pressure regulators are permitted.
- 11.5 Induction and ram tubes are free unless specified by a class regulation.
- 11.6 Fuel and air filters are free and may be fitted at the discretion of the competitor.
- 11.7 Fuel pumps are free in respect of means of operation and capacity;
- 11.8 Mechanical fuel injection is permitted unless prohibited by class regulations.
- 11.9 **Carburettors**
 - 11.9.1 The class regulations state the limitations that apply to carburettors and intake manifolds. Subject to these limitations the carburettors and intake manifolds are free.
 - 11.9.2 Carburettor jets and needles are free and the carburettor may be modified but the operating principle must remain as standard.
 - 11.9.3 Dellorto and Weber carburettor parts may be interchanged.
 - 11.9.4 The internal diameter of choke tubes is subject to class regulations. The internal shape of the choke tube shall have a radius curve leading from the outside of the choke tube to a point where the internal diameter is at the minimum size set out in the applicable class regulation. The parallel section shall remain at that diameter for at least 2mm. It is recognized that most choke tubes are purpose made. However, it is imperative that the choke tube retains a smooth finish and no grooves or holes may be drilled or cut into the internal portion of the choke tube. Otherwise stated it is the clearing tension of the regulations that all air that passes into the carburettor (directly or in directly) shall pass the section of the choke tube where the diameter of the tube reaches the minimum set out in the applicable class regulation.
- 11.10 **Fuel Injection**
 - 11.10.1 These regulations and the class regulations may limit various aspects of fuel injection systems and intake manifolds. Subject to these limitations the fuel injection systems and intake manifolds are free.
 - 11.10.2 Where the class rules allow fuel injection, individual throttle bodies, butterflies, rollers and slides are not permitted on the 1660 and 2.1 class. It is recommended the original intake manifold may be used for fuel injection; however homemade intake manifolds are allowed limited to the throttle body sizes specified. . These may be ported and/or flowed. A single throttle body, not exceeding 60mm, may only be used in the 1660 class and 70mm. in the 2.1 class.
 - 11.10.3 Competitors may elect to install two injectors per cylinder in classes where fuel injection is permitted, provided they operated from a single controlling source.
 - 11.10.4 No secondary injection systems are permitted, unless permitted in class regulations.

Secondary injection is defined as:

- 11.10.4.1 The use of more than one system to activate / operate more than one injector per cylinder to in put the fuel into the cylinder; or
- 11.10.4.2 The injection of water or methanol together with the fuel utilized with the latter option is only allowed to turbo charged engines.
- 11.10.5 Subject to these limitations and the relevant class regulations the injection is free.

11.11 Ignition

- 11.11.1 The ignition regulations are specified with in each class regulation.
- 11.11.2 In all cases where standard (original equipment) or specified ignition units are stipulated these units shall remain completely unaltered. Any sign of tampering or unauthorized modification will be regarded as cheating.
- 11.11.3 Where standard ignition is stipulated all the sensors that make up the ignition system shall be standard parts specified for the particular engine utilized. The crankshaft position sensor may be removed from the flywheel and replaced with a timing disc and pick-up at the crank shaft pulley. In this case steps must be taken so that the unit can be sealed by the technical team.
- 11.11.4 The ignition system must be visible and accessible for removal. The technical consultant is authorized to check the unit and the wiring at any time during an event.
- 11.11.5 All engines must have a fixed T.D.C. mark on the front of the engine.
- 11.11.6 Aftermarket ignition is permitted unless prohibited in a class.
- 11.11.7 Ignition systems may in corporate rev limiters and may be programmable for timing only.
- 11.11.8 Engines that do not have distributors in standard donor form must use a sensor on the crank shaft pulley or crank shaft damper only.
- 11.11.9 Any electronic device that controls more than just the supply of spark to the engine (and the permitted rev limiting function) is deemed to be an engine management system.

11.12 Electronic / Engine management

- 11.12.1 Whenever the regulations allow engine management systems these systems are (unless otherwise stated) limited to systems that are sold, serviced and supported in South Africa.
- 11.12.2 No system that would permit any form of traction control or administer any form of control over the braking system is permitted. ABS brakes are not allowed.
- 11.12.3 No electronic attachments or sensors may be affixed to the axles or wheels.
- 11.12.4 In all cases all auxiliary inputs and out puts should have values set to have absolutely no effect on the operation of the engine, gearbox, differential or brakes.
- 11.12.5 The system shall have a plug where a computer or controller can be plugged in to the system.
- 11.12.6 Telemetry systems are not permitted. DATA LOGGING is defined to be the recording of engine information such as temperature and pressure in electronic format capable of being accessed by computer. Displays indicating such information are permitted
- 11.12.7 The control unit for the ignition / engine management may not be connected to carburettors, brakes, manifolds, gearbox, drive train or wheels through means other than the permitted sensors. The unit as well as all wires connected thereto shall be visible and accessible for removal.

CR12 FUEL AND FUEL ADDITIVES

- 12.1 Generally please refer to GCR 240. Maximum of 95 octane.

- 12.2 Throughout these regulations pump fuel shall mean a petroleum fuel dispensed from a filling station pump, in terms of the fuel sale and distribution regulations of the Republic of South Africa. Such fuel may be of unleaded or lead replacement type.
- 12.3 Fuels are allocated per class – please refer to the annexure at the end of each class.
- 12.4 Organizers who run Non National championship club classes shall specify the fuel to be used in that class.
- 12.5 No diesel is permitted. No ethanol is permitted. No toluene is permitted in any fuel.
- 12.6 Methanol is permitted provided:-
 - 12.6.1 That the specific methanol safety features are in place at the venue; and
 - 12.6.2 That the specific clothing regulations are complied with; and
 - 12.6.3 That the vehicle is marked for methanol; and
 - 12.6.4 It is permitted in the class regulations.
- 12.7 Only a single type of fuel is permitted, meaning that, as an example, no methanol may be introduced in to race fuel by any means at any stage of the induction / combustion process. Different brands of fuels may be used
- 12.8 The only permitted additives to fuel are:
 - 12.8.1 To race fuel (inclusive of LL100)–Proprietary branded upper cylinder lubricants / two stroke oil;
 - 12.8.2 To pump fuel (as the specified fuel) – Proprietary branded upper cylinder lubricants / two stroke oil;
 - 12.8.3 To pump fuel (when other fuels are also permitted) – proprietary branded octane boosters and Proprietary branded upper cylinder lubricants / two stroke oil;
 - 12.8.4 To methanol – Proprietary branded oils / two stroke oil / castor oil / vegetable oil
- 12.9 Fuel testing
 - 12.9.1 Fuel shall in the first instance be checked by using a Digitron fuel conductivity meter and/or measuring the specific gravity of the fuel. The results of this method of testing shall be used by all race officials to decide whether fuels are compatible with clean fuels supplied by organizers.
 - 12.9.2 A competitor shall have the right to invoke the testing procedure set out in GCR 240. Such procedure shall be at his expense. In order to invoke this procedure he shall lodge a deposit of R10 000 (ten thousand Rand) with MSA through the stewards of the event.

CR13 TOW HOOKS & REMOVAL OF VEHICLES

- 13.1 All vehicles shall be fitted with a clearly marked towing eye, painted bright yellow, front and back, in order that recovery vehicles may drag stranded vehicles off the circuit with the least delay. Such towing eye shall not protrude from the front or back of the vehicle. It is suggested that properly supported flat bar attached to the roll cage post would provide an ideal means of dragging a stricken car off the circuit using a webbed tow rope.
- 13.2 All vehicles shall be fitted with eyes or hoops in the engine compartment, painted bright yellow that would enable the vehicle to be lifted by a break down vehicle. This is especially necessary in space-framed vehicles. These eyes or hoops shall be affixed in line with the chassis rails. The hoops may be replaced by permanently fixed straps that are mounted on to a suitable point in the vehicle.
- 13.3 Vehicles may also fit an overhead, roll cage mounted towing eye. The eye must be able to accept a D shackle.
- 13.4 This regulation shall not apply to classes that have external bumpers.

CR14 WEIGHT REGULATIONS

- 14.1 Each set of class regulations specifies a minimum weight for the class–please refer.
- 14.2 Ballast weight may be made non removable by being poured into the pipe work of the chassis.
- 14.3 The following applies to removable ballast weights:

- 14.3.1 Lead blocks shall be used and mounted above the floor;
- 14.3.2 The ballast shall mount under or immediately in front of the driver's seat; and
- 14.3.3 The ballast will be secured with 10mm high tensile bolts and tear plated. There shall be at least two bolts per 10kg block.
- 14.4 Where weights are to be checked the SR's for the event shall stipulate which scales are to be used and these scales shall be the only point of reference for all matters arising from any weighing. The organizers shall be obliged to have properly certified test weights available.
- 14.5 Weight shall include the driver and the vehicle will be in an as raced condition.

CR15 SPECIFICATIONS OF A STOCK ENGINE

- 15.1 Any normal production type engine is allowed. The class regulations should be consulted for minimum number of engines that have had to be manufactured for an engine to be used. The onus is on the entrant to prove the source and history of an engine.
- 15.2 A STOCK engine is viewed as a single unit comprising a cylinder block and a cylinder head (or heads) that were designed and manufactured by the manufacturer concerned for use with each other. Hence cylinder heads from another type of engine may not be substituted, irrespective of whether or not they fit onto each other. Similarly cylinder blocks from another type of engine may not be substituted. Ford to Ford and Nissan to Nissan. No adapters etc. are allowed. Cylinder heads from the same manufacturer may be interchanged on different engines from the same manufacturer, providing it is a straight bolt on.
- 15.3 The following modifications may be made to stock engines:-
 - 15.3.1 The cylinder head may be skimmed.
 - 15.3.2 Compression ratios are free.
 - 15.3.3 The cylinder head ports may be modified no further in than a distance of 20mm inwards of the valves outer edge. Cylinder head port faces and manifold port faces maybe blended together for a maximum of 10mm into either the cylinder head port or manifold port.
 - 15.3.4 Pistons may not be pocketed for valve head clearance.
 - 15.3.5 Camshaft profiles are free but the number of lobes and their location may not be altered. The cylinder head may be relieved if required by a change of camshaft.
 - 15.3.6 The adjustment of valve timing by means of vernier gears or off set keys is permitted.
 - 15.3.7 Camshaft timing adjustment is free and the camshaft drive may be modified for adjustment purposes.
 - 15.3.8 The cylinder head valve seats may be modified. However, only 3 angled seats are permitted.
 - 15.3.9 Valve seats inserts are permitted to address unleaded fuel concerns.
 - 15.3.10 The method of valve tappet clearance adjustment may be modified.
 - 15.3.11 Tappet or valve covers are free as long as the cover is not a part of the valve train.
 - 15.3.12 Solid valve lifters may be substituted for hydraulic valve lifters and vice versa.
 - 15.3.13 The cylinder block may be skimmed / decked.
 - 15.3.14 Oil sumps, baffles and oil pickups are free. Sumps are free in respect of volume and design.
 - 15.3.15 The removal of metal to balance internal engine reciprocating components is allowed. (Subject to your class rules)
To clarify this means that the crank shaft may be drilled / ground to balance. Pistons and connecting rods may be machined to achieve quality of weight. However one piston and one connecting rod that need not be attached to each other must be left untouched.
 - 15.3.16 The shot opening and not riding of internal engine components is allowed. Knife edging however is not allowed.
 - 15.3.17 A flywheel shall be fitted. Please consult the class regulations for weights and type permitted.

- 15.3.18 All fasteners (Nuts, Studs & Bolts) are free. The gudgeon pin may be made floating.
- 15.3.19 Pulley sizes are free.
- 15.3.20 Flexible engine mountings may be made solid.
- 15.3.21 No forced induction such as turbo charging or super charging is allowed, unless specifically allowed in the class regulations.
- 15.3.22 Oil flow restrictors in the cylinder head are permitted.

Restrictions:

- 15.4 The following restrictions are imposed on modifications to stock engines:-
 - 15.4.1 The inlet and exhaust valve head and stem diameters shall remain as specified for the engine utilized. The valve may not be flowed.
 - 15.4.2 The cylinder block may be bored to fit the standard piston stipulated in the manufacturer's specifications plus 1.52 mm;
 - 15.4.3 Pistons shall be as per original manufacturer's specifications in respect of sizes and shape. The maximum over size is the manufacturer's specification for standard plus 1.52 mm.
 - 15.4.4 Connecting rods may not be substituted and shall remain standard, but for balancing.
 - 15.4.5 Crank shafts shall remain as standard but the journals may be resized to manufacturer's specification.
 - 15.4.6 All parts other than the camshafts and cam drive gear shall be according to standard specifications.
 - 15.4.7 Roller rockers, billet steel crank shafts and cast steel connecting rods are not permitted even if the donor engine had these fitted in original equipment form.
- 15.5 The following applies to the ancillaries of stock engines:-
 - 15.5.1 Only standard water pumps are permitted. No electric water pumps are allowed.
 - 15.5.2 Alternators, power steering pumps and air conditioning pumps may be removed.

CR16 SPECIFICATIONS OF A MODIFIED ENGINE

- 16.1 Any normal production type engine is allowed. A minimum of 5000 of such engines shall have been manufactured internationally and the confusion the entrant to prove the source and history of an engine. In view of the fact that cylinder heads may be changed the legality or other wise of an engine will be determined by the cylinder block.
- 16.2 The cylinder head may be substituted with another cylinder head from the same manufacturer's brand. This is clarified to mean that any cylinder head of the same manufacturer's brand as the cylinder block can be interchanged as long as the cylinder head and the cylinder block comply with the engine units criteria set out above and absolutely no modification to anything of her than minor modification to improve the alignment of the oil and water passages is required to neither the block or the head to fit the cylinder head. The bolt pattern of the head and the block must be identical.
- 16.3 The following modifications may be made to modified engines:-
 - 16.3.1 The cylinder head may be skimmed.
 - 16.3.2 The cylinder head ports may be modified.
 - 16.3.3 Porting and polishing of cylinder heads and manifolds are permitted.
 - 16.3.4 Cam shaft profiles are free provided the number of lobes and their location are not altered.
 - 16.3.5 Cam shaft timing adjustment is free and the cam shaft drive may be modified for adjustment purposes.
 - 16.3.6 The adjustment of valve timing by means of vernier gears or off set keys is permitted.
 - 16.3.7 The cylinder head valve seats may be modified.
 - 16.3.8 Valves are free.
 - 16.3.9 The inlet and exhaust valve head and stem diameters are free.

- 16.3.10 The method of valve tappet clearance may be modified.
- 16.3.11 Solid valve lifters may be substituted for hydraulic valve lifters or vice versa
- 16.3.12 Roller rockers are permitted.
- 16.3.13 Tappet or valve covers are free as long as the cover is not a part of the valve train;
- 16.3.14 Pulley sizes are free;
- 16.3.15 The cylinder block may be skimmed / decked.
- 16.3.16 Pistons may be pocketed for valve head clearance.
- 16.3.17 Pistons are free.
- 16.3.18 Piston rings are free.
- 16.3.19 Connecting rods are free.
- 16.3.20 Compression ratios are free.
- 16.3.21 Bore and stroke ratios are free.
- 16.3.22 Crank shafts are free, but for the fact that they must remain cast iron, unless the engine used was manufactured with a cast steel crank shaft. No billet steel crank shafts permitted.
- 16.3.23 Crank shafts may be knife edged.
- 16.3.24 Flexible engine mountings may be made solid;
- 16.3.25 Oil sumps, baffle sand oil pickups are free. Sumps are free in respect of volume and design.
- 16.3.26 Dry sump lubrication is permitted
- 16.3.27 The lightening of internal reciprocating components is permitted.
- 16.3.28 Cast iron main bearing caps may be replaced by steel bearing caps;
- 16.3.29 The removal of metal to balance internal engine reciprocating components is allowed.
- 16.3.30 The shot peening and nit riding of internal engine components is allowed.
- 16.3.31 A fly wheel shall be fitted but the design and specification is free. Aluminium fly wheels are permitted.
- 16.3.32 All fasteners (Nuts & Bolts) are free. The gudgeon pin may be made floating.
- 16.3.33 The application of a heat deflecting coating is permitted to the exhaust manifold and exhaust pipes, between the bolt up face of the exhaust manifold and the tail pipe.
- 16.3.34 Oil flow restrictors in the cylinder head are permitted.
- 16.4 The following restrictions are imposed on modifications to modified engines:-
- 16.4.1 No forced induction such as turbo charging or super charging is allowed UNLESS permitted specifically by class regulations.
- 16.5 The following applies to the ancillaries of modified engines:-
- 16.5.1 Water pumps are free.
- 16.5.2 Alternators, power steering pumps and air conditioning pumps may be removed.

CR17 SPECIFICATIONS OF AN OPEN ENGINE

- 17.1 Any normal production type engine is allowed.
- 17.2 The following modifications may be made to OPEN engines:-
- 17.2.1 The material of which any engine component is manufactured may be changed.
- 17.2.2 The cylinder head may be substituted, even with that from another manufacturer or brand.
- 17.2.3 The cylinder head may be skimmed.
- 17.2.4 The cylinder head ports may be modified.
- 17.2.5 Porting and polishing of cylinder heads and manifolds is permitted.
- 17.2.6 Cam shafts are free.
- 17.2.7 Cam shaft timing adjustment is free.
- 17.2.8 The adjustment of valve timing by means of vernier gears or off set keys is permitted.
- 17.2.9 The cylinder head valve seats may be modified.
- 17.2.10 The inlet and exhaust valve head and stem diameters are free.

- 17.2.11 Valves are free.
- 17.2.12 The method of valve tappet clearance may be modified.
- 17.2.13 Solid valve lifters may be substituted for hydraulic valve lifters and vice versa
- 17.2.14 Roller rockers are permitted.
- 17.2.15 Tappet or valve covers are free.
- 17.2.16 Pulley sizes are free;
- 17.2.17 The cylinder block may be skimmed / decked.
- 17.2.18 Pistons may be pocketed for valve head clearance.
- 17.2.19 Pistons are free.
- 17.2.20 Piston rings are free.
- 17.2.21 Connecting rods are free.
- 17.2.22 Compression ratios are free.
- 17.2.23 Bore and stroke ratios are free.
- 17.2.24 Crank shafts are free.
- 17.2.25 Flexible engine mountings may be made solid;
- 17.2.26 Oil sumps, baffle sand oil pickups are free. Sumps are free in respect of volume and design.
- 17.2.27 Dry sump lubrication is permitted
- 17.2.28 The lightening of internal reciprocating components is permitted.
- 17.2.29 Cast iron main bearing caps may be replaced by steel bearing caps;
- 17.2.30 The removal of metal to balance internal engine reciprocating components is allowed.
- 17.2.31 The shot peening and nit riding of internal engine components is allowed.
- 17.2.32 A fly wheel shall be fitted but the design and specification is free. Aluminium fly wheels are permitted.
- 17.2.33 All fasteners (Nuts, Studs & Bolts) are free.
- 17.2.34 The use of heat deflective coatings is free.
- 17.3 Oil flow restrictors in the cylinder head are permitted.
- 17.4 The following restrictions are imposed on modifications to open engines:-
 - 17.4.1 No forced induction such as turbo charging or super charging is allowed UNLESS permitted specifically by class regulations.
- 17.5 The following applies to the ancillaries of OPEN engines:-
 - 17.5.1 Water pumps are free.
 - 17.5.2 Alternators, power steering pumps and air conditioning pumps may be removed.

CR18 SPECIFICATIONS OF A ROTARY ENGINE.

- 18.1 Any twin rotor production type engine is allowed. The onus is on the entrant to prove the source and history of an engine.
- 18.2 Any modification that is permitted outside the engine (as stipulated in the open engine specifications) shall be permitted for rotary engines.
- 18.3 The following modifications may be made to rotary engines:-
 - 18.3.1 Porting is allowed.
 - 18.3.2 Peripheral port engines are permitted.
 - 18.3.3 Porting may extend past the face of the rotor.
 - 18.3.4 The water seal may be modified.
 - 18.3.5 The water jackets may be filled.
- 18.4 **The following limitations apply:-**
 - 18.4.1 No forced induction such as turbo charging or super charging is allowed on rotary engines.
 - 18.4.2 The maximum internal diameter of the last 30 cm of the tail pipe shall be 90 mm. Only a single tail pipe is permitted.
 - 18.4.3 No titanium rotors are permitted.
 - 18.4.4 No aluminium housing plates are permitted.

CR19 GENERAL SAFETY

- 19.1 No ballast, other than weights fitted to comply with minimum weight regulations is allowed. Any such ballast shall be fitted as set out in CR 14 above.
- 19.2 All bonnet sand fenders shall be in place at the commencement of every race.
- 19.3 Competitors must be able to exit their vehicles and reach a point no less than 10 (ten) meters from the vehicle within 30 seconds.

CR20 CRASH HELMETS

- 20.1 Helmets must fit properly, be secured and be suitable for the purpose intended.
- 20.2 Helmets as deliberately constructed so as to absorb the energy of an impact. Therefore stands to reason that if, following such impact, the helmet are damaged (even if the damage is not readily apparent) it must be replaced.
- 20.3 Painting or the use of solvents on helmets can damage the mind is there for potentially dangerous. Helmets should be cleaned with a weak solution of soap and water.
- 20.4 Helmets should be as closely fitting as possible, consistent with comfort. No sideways movement should be possible, nor should the helmet be able to be pulled off the head in a forwards direction with the strap secured.
- 20.5 When not in use helmets should be stored in a cool, dry place away from sunlight, preferably in a helmet bag.
- 20.6 Visors must provide clear vision.
- 20.7 When there is doubt about a helmet's fitness, the chief scrutineer shall be empowered to impound the helmet for the duration of the event. Once the event is complete the helmet may be returned. Helmets not claimed within 7 days will be destroyed.
- 20.8 Full face helmets are compulsory.

CR21 COCK PIT AREAS / FIRE WALLS

- 21.1 All vehicles must have a properly constructed cock pit area. The material used to make the firewall, shaft tunnel and cock pit area shall not be combustible.
- 21.2 This cock pit area must house the seat and the controls of the vehicle. The cock pit area must separate the competitor from the engine compartment as well as from compartments where the fuel tank is housed.
- 21.3 The cock pit must have a floor covering the full area where the driver is seated and it must part of the original vehicle's body in the case of original road going vehicles or must be welded into place in space frame vehicles.
- 21.4 Properly constructed firewalls are a vital part of the mechanisms required to prevent the passage of flame into the driver's compartment. All fire walls, regardless of vehicle construction must be complete in all respects. This specifically requires the area behind the rear axle to be covered as well. Their construction must be such that they, the firewalls, would be fluid proof. This implies that fire wall will be constructed in such a fashion that all pipes, parts of chassis or any other item that need stop ass through the firewall, pass through with the smallest hole possible. All firewalls shall be constructed of metal hence materials such as rubber and fiberglass are not acceptable as firewalls.
- 21.5 Bonnets shall be so designed and fitted that they would prevent the passage of flame in to the cockpit. Hence no gaps are permitted between the bonnet and the dash board / window aperture area.
- 21.6 All pipes and wires that pass through the fire wall shall have rubber grommets.
- 21.7 The cockpit area on the passenger side of the driver may be enclosed. The following shall apply:
 - 21.7.1 The material used shall be folded down ward from the horizontal plane on the driver's side.
 - 21.7.2 The cover may slope downwards from the engine bay to the gear lever. At that point it shall be horizontal and shall be no higher than 50 cm above the original floor or chassis beams. The cover may slope upward to the parcel shelf / rear

window / tail gate sill as the case may be from a point 50 cm behind the seat. For existing vehicles a 500 mm

Gap must exist. This gap must be wide enough to extricate the competitor on a back board.

21.7.3 The cover shall be removable.

21.7.4 The cover shall be able to support a weight of 100 kg.

CR22 ROLL CAGES AND SIDE IMPACT (“SISSY”) BARS

- 22.1 The safety cage must be designed and constructed so that it substantially reduces body shell deformation and so reduces the risk of injury to occupant. The essential features of a safety cage are sound construction, design to suit the particular vehicle, ad equates mountings, and a close fit to the body shell. The side impact bars shall be placed so that they offer the most strength and protection in the event of a side impact.
- 22.2 The specifications for the roll cages and side impact bars can be found in the followings sections of the rule book:-
- 22.2.1 Saloons – in the section dealing with saloons.
 - 22.2.2 Midgets – in the midget class regulations.
 - 22.2.3 Ninja and Micro midgets – in the Ninja and Micro midget regulations
 - 22.2.4 Sprint cars – in the sprint car regulations.
- 22.3 The roll cage pipes should be a straight as possible. Where the construction of the vehicles necessitates bowed or curved pipes these shall be reinforced by triangulation.
- 22.4 The safety cage shall be padded in the immediate vicinity of the competitor’s body with a fire retardant foam material.
- 22.5 The cage shall be fitted with a base plate, welded, or bolted on 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 for man integral part of the chassis itself and shall accordingly be welded directly onto the chassis legs.
- 22.6 No holes or slots or any type of measure intended to reduce the weight of the pipe work utilized is permitted.
- 22.7 None of the legs of the roll cage may rely on another element of the roll cage for support.

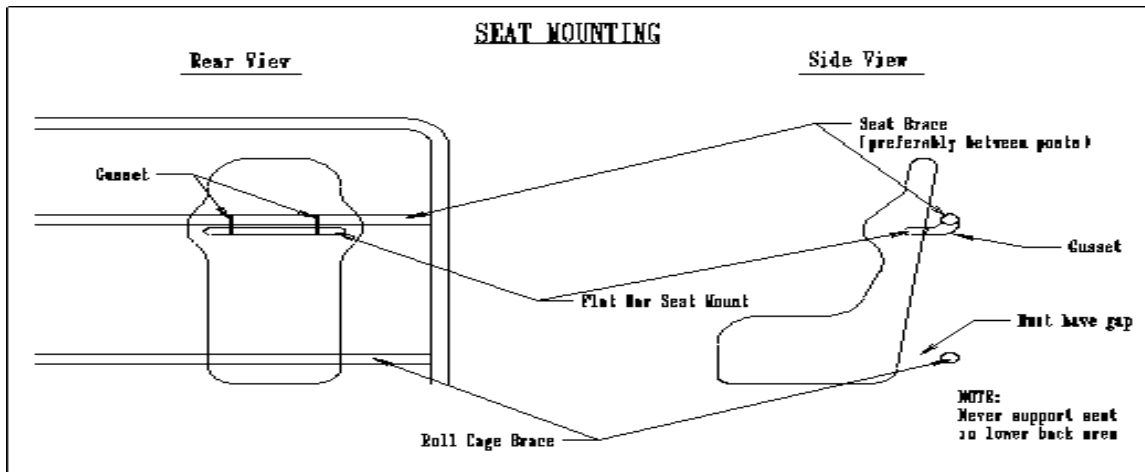
CR23 SAFETY BELTS

- 23.1 The seat belts and the installation must comply with the MSA specifications.
- 23.2 Arm straps are optional, but must be of the quick release type.
- 23.3 Safety belts must be properly stitched and no holes may be drilled into the safety belts.
- 23.4 Only approved 4 and 5 point harnesses may be used and these must be properly mounted on welded metal mounts to the chassis and roll cage..

CR24 SEATS

- 24.1 It is recommended that FIA approved competition seats be fitted.
- 24.2 Only racing type seats are allowed. It follows that no conventional passenger vehicle seats may be used in their original or modified state.
- 24.3 Non-FIA approved seats shall be reinforced by clearly visible aluminium or metal backing fitted directly behind these at if it does not mount flush against a properly constructed panel. Such backing shall be properly shaped in accordance with the seat of the vehicle and shall have no sharp edges and for man integral part of the mounting of the seat itself. Fibre glass seats shall be covered. The minimum thickness of materials for non FIA seats is as follows:
- 24.3.1 Fibre glass / composite materials – 8 mm
 - 24.3.2 Aluminium – 2.5 mm
- 24.4 Seats must be bolted with tear plates as set out for safety belts above as follows:-

- 24.4.1 When original road going vehicles are used – to the floor pan of the vehicle – provided that the complete floor plan is still of sound construction and free of rust;
- 24.4.2 In all other cases – to specifically constructed seat mounting legs that are in turn mounted to the chassis of the vehicle.
- 24.5 No cracked or broken seats are permitted.
- 24.6 The driver must sit to one side of the centre line in all saloon vehicle classes.
- 24.7 A properly braced and triangulated cradle shall be installed if a seat needs to be raised. The triangulation shall be on both length ways sides (to protect against a forward failure) and at least one of the other sides. The cradle shall in turn be fitted as if it were a seat



CR 25 CLOTHING.

- 25.1 Properly accredited single layer fire retardant race suits are mandatory. Multi layers suits are highly recommended. Please refer to the MSA circular in respect of labelling that would be required on all locally produced race suits. It is printed at the back of this book for the convenience of officials and competitors. Please note this regulation does not require new overall strobe purchased and should rather be seen as a measure to protect the competitor against unscrupulous purveyors of inferior race wear.
- 25.2 Approved fire retardant gloves are compulsory.
- 25.3 The use of fire retardant socks and balaclavas is highly recommended for all competitors. **Competitors are ADVISED that they will be permitted to race without these socks and balaclavas but in doing so they knowingly assume the risks associated with being involved in a fiery incident without these safety garments.**
- 25.4 Ideally fire resistant clothing should carry the FIA'S approval label.
- 25.5 Clothing must be in good condition and must fit properly.

CR26 DRIVER CONTROLS

- 26.1 All vehicles shall be operated by means of a steering wheel, which shall not be of wood.
- 26.2 The steering wheel may be removable. Generally competitors should be aware that a removable steering wheel aids the extraction of the driver in the event of medical intervention.
- 26.3 The steering column may be repositioned to suit the driver. He shall however remain seated to one or other side of the centre line of a saloon car.
- 26.4 The steering column may be replaced with a purpose made column. No straight through column are permitted. There must at least be one joint in the column, preferably at an angle to the main column.
- 26.5 The brakes, accelerator, and clutch shall be operated by means of suitably sized and mounted foot pedals. **Pedal boxes are free.**

- 26.6 MSA may upon application allow certain specified modifications to be made in order to accommodate the needs of a handicapped competitor. Such application is to be fully motivated in writing. The MSA OR C shall in its deliberations consider the rights of the handicapped as well as those of the organizers and other competitors.
- 26.7 **All vehicles must be fitted with dual throttle return springs.**
- 26.8 It is recommended that clutch less vehicles shall have a dual cable system attached to the throttle. Such a system must close the throttle without relying on a spring if the driver lifts the pedal.
- 26.9 No in car adjustments, other than brake bias, permitted.
- 26.10 Telemetry systems are not permitted. DATA LOGGING is defined to be the recording of engine information such as temperature and pressure in electronic format capable of being accessed by computer. Displays indicating such information are permitted.

CR27 KILL SWITCHES

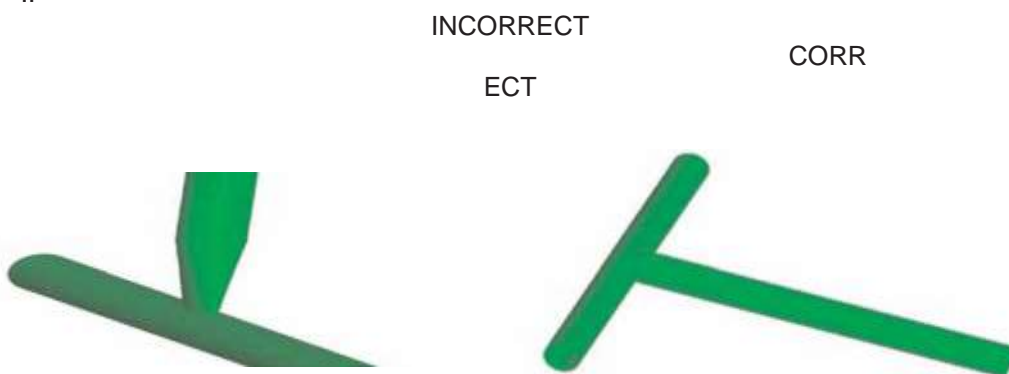
- 27.1 An effective kill switch system must be fitted. The switch must:
 - 27.1.1 Be clearly marked in red and externally with a regulatory blue triangle with a red flash therein.
 - 27.1.2 Be within the driver's reach, when seated and strapped in.
 - 27.1.3 Be operational from outside the vehicle for use by marshals. This can be achieved by activating the main switch by way of a pull cable;
 - 27.1.4 Break the neutral or negative circuit from the battery to the engine and chassis
 - 27.1.5 Break the ignition and electric fuel pump circuits.

CR28 FLUID RETENTION

- 28.1 All vehicles shall have their sump, gear box and differential / axle plugs wired, and all the oil filters clamped or strapped.
- 28.2 A radiator water catch tank of a minimum capacity of 2Litres shall be fitted to the cooling system.
- 28.3 An oil catch tank, with a minimum capacity of 2litres, capable of accepting surplus oil and fumes from the engine shall be fitted. The catch tank shall be connected to each breather outlet by means of a flexible pipe or similar conveyance, designed to feed the oil or fumes to the tank. The catch tank is to be emptied between races.
- 28.4 A drip tray shall be installed beneath the engine. The tray shall be securely mounted and shall have a lip all round.

CR29 PIPE WORK

- 29.1 All joints and seams in the construction of the vehicle are to be properly mitred and shall be welded.....



CR30 PROP SHAFT / DRIVESHAFT / RUNNING GEAR PROTECTION

- 30.1 Drivers must be protected from open running prop shafts by two steel bands, with a minimum width of 50 mm. The bands shall be at least five mm thick and shall be bolted or welded to the chassis. The object of these bands is to prevent a broken shaft from rising and coming into the cock pit area. The one band shall be 150 mm behind the front yoke.
- 30.2 All vehicles shall have a collar / hoop that would prevent the front end of the running gear (prop shaft or torque tube) to lodge in the track should it break while the vehicle is in motion. To be effective this hoop or collar should be approximately 25% along the distance of the shaft as measured from the front. It is not necessary to install this hoop if the construction of the vehicle already fulfils this function by having the prop shaft run above the chassis.

CR31 BATTERIES

- 31.1 All batteries must be securely fixed in to the vehicle in a battery box secured by bolts with a diameter of at least 8 mm and reinforcing plate.

CR32 EXHAUSTS AND SILENCERS

- 32.1 All vehicles and SR's shall comply with GCR 245 and the Environmental code of MSA
- 32.2 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.

CR33 FUEL PIPES AND FUEL TANKS

- 33.1 It is highly recommended that properly designed and manufactured racing fuel tanks, especially bag tanks are utilized. The use of fuel tank foam is also highly recommended. Metal fuel tanks shall be made of metal at least 1 mm thick. Boating tanks are permitted, provided they comply with the balance of this regulation.
- 33.2 A fuel tank breather, which shall vent externally, must be fitted to all fuel tanks. A non - return valve shall be fitted to the breather. The non – return valve must not be airtight.
- 33.3 The fuel tank shall have a non – vented cap. The cap may not be mounted into the body work of the vehicle. Where a conventional road going vehicle or space frame vehicle is used the cap shall be fitted directly to the tank and be housed within the boot space. In all other cases, a rubber hose from the tank to the cap will be allowed. The fuel filler hose will terminate into the cap fitting which shall be flush mounted to the upper horizontal portion of the body shell or panelling as the case maybe.
- 33.4 Fuel tanks must be mounted in a separate compartment to the driver. A complete, sealed firewall must be constructed to separate the competitor from the fuel tank and the fuel pumps. Where conventional road going vehicles are used the fuel tank will mount inside the boot area. In hatch type vehicles the fuel tank will be placed in the spare wheel well. In these cases a firewall will be constructed from the driver's side of the tank to the tail gate sill.
- 33.5 Fuel tanks must be securely mounted to the boot floor or the chassis of the vehicle with bolts or metal straps. Tanks may not be welded into place.
- 33.6 The fuel tank shall preferably be mounted on the driver's side of the rear axle. If the tank is fitted behind the rear axle and below the boot floor a hoop shall be welded into place between the chassis rails to protect the tank. The material used shall be pipe with an outside diameter of 38 mm and a wall thickness of 2mm. The hoop will be braced.
- 33.7 There may only be a single fuel tank which shall be the only source of fuel to the carburettors or fuel injection system. The fuel line may be branched to allow dual or spare pumps to be fitted
- 33.8 The fuel pumps shall be securely mounted.
- 33.9 Fuel pumps may not be fitted in the cockpit. All fuel lines in the cock pit must be of copper or steel tubing.

- 33.10 Inlets and outlets into and out of the tank shall be securely connected to the fuel lines, with special care being taken if the out let is below the tank.

CR34 DRY SUMP TANKS AND OIL LINES

- 34.1 Where dry sump lubrication is permitted the dry sump tank may be fitted inside the cockpit of saloon cars.
- 34.2 All oil lines shall be properly shielded.
- 34.3 The competitor must be shielded from the tank / oil cooler.
- 34.4 **All hoses to be hydraulic hoses.**

CR35 RESERVED

NOTICE

Competitors and Scrutineers are warned that the practice of customizing hand held extinguishers for this purpose is in correct and dangerous. These types of extinguishers have pick up pipes that collect the extinguishing material from the bottom of the cylinder when in an upright position. They do not function in an upside down position for example. Suitably designed pressurized canisters are available from specialist Motorsport shop and fire safety suppliers.

**PLEASE
NOTE**

THIS SECTION ONLY APPLIES TO SALOON VEHICLES. THE REGULATIONS IN RESPECT OF THE TOPICS ADDRESSED IN THESE REGULATIONS ARE FOUND IN THE INDIVIDUAL REGULATIONS OF THE VARIOUS OPEN WHEEL CLASSES – PLEASE CONSULT THOSE IF YOU RACE AN OPEN WHEEL CLASS.

**CR36 VEHICLE TYPES
DEFINED**

- 36.1 These regulations envisage 3 specific types of vehicle being:-
- 36.1.1 The original road going vehicle that has had a roll cage fitted and is now used as a race car.
 - 36.1.2 The conventional road going vehicle that has been extensively modified and has had changed made to the suspension pick up points. These are termed semi space frames.
- 36.2 The fully fledged purpose built racing frame.
- 36.3 These three types have been separated in these rules as certain classes are limited to original road going vehicles.
- 36.4 ORIGINAL ROAD GOING VEHICLES
- 36.4.1 These are vehicles that were designed and built for road going use by commercially recognized motor manufacturers.
 - 36.4.2 These vehicles are converted to oval racing vehicles.
 - 36.4.3 They do not include the semi – space frame or space frame vehicles.
 - 36.4.4 This use of this type of vehicle is seen as a limitation. There for whenever this class is specified semi space frames and space frames are not permitted.
- 36.5 **SEMI SPACE FRAME VEHICLES**

- 36.5.1 These include vehicles are converted from the original road going vehicles.
- 36.5.2 Major structural changes have been made and the roll cage and pipe work inserted into the vehicle have effectively mounted the drive train and the suspension.

36.6 SPACE FRAME VEHICLES

- 36.6.1 These are purpose built tubular steel chassis.
- 36.6.2 Where ever the class rules permit space frames original road going cars and semi space frames are also permitted, with the same modifications as those permitted for space frames.

CR37 GENERAL RULES REGARDING THE EXTERNAL BODY SHELL—APPLICABLE TO ALL SALOONS

- 37.1 Roadster type bodies may be used provided they were built with a top by the manufacturer. A soft top must be replaced by a replica fibre glass top.
- 37.2 Measurements of the body shell shall be made a cross the driver's seat in respect of the width of the vehicle and in the centre of the vehicle in respect of the length of the vehicle. Such measurements shall exclude wheel arches and flares.
- 37.3 The maximum thickness of the front and grille panels of vehicles shall be:-
 - 37.3.1 Metal-1.2-mm
 - 37.3.2 Aluminium—1.6mm
 - 37.3.3 Fibreglass—4-mm.
- 37.4 Should the height of the door impair access it shall not be cut away but shall have a hinge arrangement whereby it folds, at or near the top sissy bar. Doors may be made fully removable, provided they are securely fitted during races. The securing pins shall be removable from the outside.
- 37.5 The construction, safety, and finish of the original steel body or replacement panels to be to the satisfaction of the Scrutineers. No sharp edges are permitted. Please also see the CR 21 regarding sharp edges inside the cockpit.
- 37.6 The front panels must retain the original grille and light apertures, provided that both of these may be blanked off. Ducts to supply cool air to the carburettor / fuel injection system or the brakes may be installed into these panels, always subject to the class regulations that control the intake of air into the engines
- 37.7 The rear boot panels (meaning the portion between the tail lamps) shall be retained.
- 37.8 Boot lids and tail gates shall in place. They must be adequately secured in the closed position with fasteners
- 37.9 All panels, irrespective of whether or not they are replacement panels shall be securely fixed and no loose or flapping panels shall be permitted when a vehicle starts a race. The driver shall ensure that steps are taken between races to secure body panels that have become loose or damaged.
- 37.10 Bonnets and boot lids shall be secured by means of either four pins or two pins and two corner plates. The area around the pin must be reinforced in order to avoid tearing. Operational doors must be fitted with working latches to prevent them opening during races. The latches must be operation al from outside the vehicle. Latches must be fitted so that they do not present a hazard to other competitors, especially on the sides.
- 37.11 The roof shall be complete. The roof must be the original shape of body being used.
- 37.12 Wheel arches may be modified to accommodate wheels. Wheel arches may not be reinforced with steel pipes or any other material. The wheel arches may be reinforced using the same material as the rest of the wheel arch. The object of the permitted reinforcement is to protect the wheel area and any reinforcement that is designed to be used as a weapon is prohibited.

- 37.13 No fastener situated on the front, rear or side panels of the vehicle shall protrude more than 30 mm beyond the body work

CR38 CONSTRUCTION RULES APPLICABLE TO ORIGINAL ROAD GOING VEHICLES

- 38.1 Further restrictions on replacement, repair, and modifications allowed are found in the class regulations.
- 38.2 Bodies may not be lengthened, shortened, or narrowed;
- 38.3 The silhouette as seen from the front shall remain symmetrical, with no off set being permitted.
The silhouette as seen from the sides, the front and the back shall remain the same as the original vehicle, with latitude being allowed for repaired accident damage only.
- 38.4 Vehicles 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 to a vehicle it shall be considered a semi space frame.
- 38.5 All interior trim must be removed
- 38.6 The roof may not be lowered and any hole caused by the fitment of for instance a sunroof in the donor vehicle shall be closed.
- 38.7 The front valance and radiator carrier may be mounted as per space frame regulations.
- 38.8 The internal fender walls and wheel houses shall be retained front and rear. The shaft tunnel shall be retained. The boot floor shall be retained.
- 38.9 The engine bay / cock pit bulkhead / firewall shall be retained but may be altered to accept another gearbox should class regulations permit an alternative gear box. The material utilized shall be sheet metal with a minimum thickness of 1 mm mounted on at least a 15 x 15 x 2 mm frame.
- 38.10 The completer of pillar structure of the vehicle shall be retained.
- 38.11 The vehicle may be finished by the fitment of either the original plastic bumper or a fibre glass replica of the bumper.
- 38.12 The inner portion of all doors may be removed. In all cases, care must be taken to avoid edges that could cause injury. Doors may be replaced with sheet metal or fibre glass 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 shape less one piece side sections, typically flat sheets, is not allowed.
- 38.13 Rear doors must be adequately secured in the closed position with fasteners.
- 38.14 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 fibre glass 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. In both cases the contours of the body shall be retained.
- 38.15 Only the bonnet, the front fenders, the 2/4 doors and the tail gate / boot lid may be replaced with exact replica parts. The "B" and "C" pillars may be repaired with fibre glass replicas. Once all the pillars have been replaced with fibre glass the car will be classified as a semi space frame.
- 38.16 The roll cage may not extend beyond the cockpit.
- 38.17 Under trays may NOT be fitted.
- 38.18 All suspension parts (excluding shock absorbers) shall remain standard, albeit that they may be modified in accordance with class regulations. There for a vehicle with arose jointed, A-arm front suspension shall be classed as a semi space frame if it still has the original body.
- 38.19 All silhouettes, frames and roll cages may not be off set.

CR39 CONSTRUCTION RULES APPLICABLE TO SEMI SPACE FRAME VEHICLES

- 39.1 Further restrictions on replacement, repair, and modifications allowed are found in the class regulations.
- 39.2 Bodies may not be lengthened, shortened, or narrowed.
- 39.3 The silhouette as seen from the front shall remain symmetrical, with no off set being permitted.
The silhouette as seen from the sides, the front and the back shall remain similar to the original vehicle, with latitude being allowed for repaired accident damage.
- 39.4 All interior trim must be removed.
- 39.5 Vehicles of this type may be re bodied. The process of re-bodying requires the entire outer shell of the vehicle to be separated from the monocoque.
- 39.6 The roof may not be lowered and any hole caused by the fitment off or instance a sunroof in the donor vehicle shall be closed.
- 39.7 The front valance and radiator carrier may be mounted as per space frame regulations.
- 39.8 The internal fender walls and wheel houses may be removed.
- 39.9 The vehicle may be finished by the fitment of either the original plastic bumper or a fibre glass replica of the bumper.
- 39.10 The inner portion of all doors may be removed. In all cases, care must be taken to avoid edges that could cause injury.
- 39.11 The use of shapeless one – piece side sections, typically flat sheet metal, to replace doors and fenders is not allowed.
- 39.12 The body may be removed in its totality and replaced with a replica body shell.
- 39.13 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 fibre glass 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. In both cases the contours of the body shall be retained. An aluminium sheet, the size of the door below the window aperture, must be fitted. An aluminium sheet must be fitted to the whole roll cage roof area as well.
- 39.14 The removal of the floor pan is permitted, provided that a replacement pan is made for the driver's area and the seat and roll cage posts are properly mounted as per the regulations for space frames.
- 39.15 Under trays may be fitted if they do not exceed the under floor area of the engine bay.
- 39.16 The tunnel and part of the fire wall may be modified, using metal with a thickness of 2 mm, when converting front wheel drive to rear wheel drive.
- 39.17 The original floor pan, the interior floor area of the boot and the fire wall, may be strengthened for the purposes of rigidity. The material used for this purpose shall be a square tube not exceeding 15 mm x 15 mm x 2 mm.
- 39.18 All silhouettes, frames and roll cages may not be off set.

CR40 SPACE FRAME VEHICLES

- 40.1 The body may consist of a single continuous shell or loose panels. It is recommended that the driver's door be a separate item.
- 40.2 The silhouette, frame and roll cage as seen from the front shall remain symmetrical, with no offset being permitted.
- 40.3 The vehicle may be finished by the fitment of either the original plastic bumper or a fibre glass replica of the bumper.
- 40.4 Vehicles shall in essence retain the same shape and form as the vehicle on which it is modelled and must still be easily recognizable as being such a vehicle.
- 40.5 Bodies are to be secured to the chassis by means of support plates that shall not be more than
2 mm thick. The length and width of these plates are free. These plates shall mount to support pipes or the chassis.

- 40.6 Continuous mounting plates, running the full length of the joint areas are not permitted. It follows that the mountings shall be designed to secure the body work in a safe manner without creating reinforcements.
- 40.7 No ribbing or reinforcing is allowed in any fibre glass body panels or sections, except the boot lid, roof, and bonnet.
- 40.8 Under trays may be fitted if they do not exceed the under floor area of the engine bay.
- 40.9 There shall be a properly reinforced floor pan for the driver's area of the cockpit.

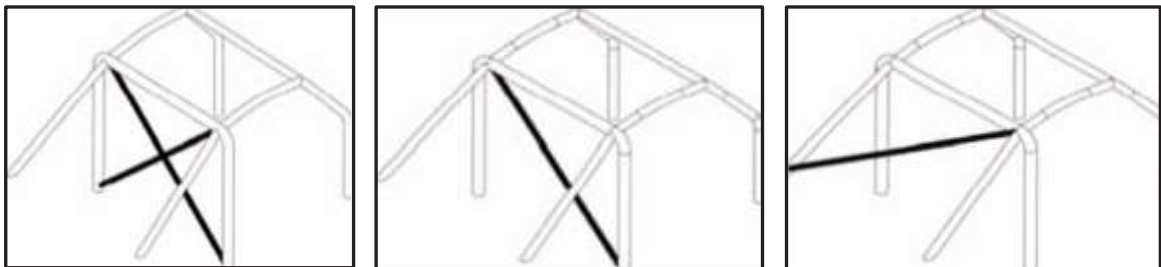
CR41 SPACE FRAME CHASSIS CONSTRUCTION

- 41.1 The material used to build the chassis and frame shall be suitable steel tubing.
- 41.2 The chassis shall incorporate the following:-
 - 41.2.1 A roll cage as set out in CR 42 below
 - 41.2.2 Properly triangulated mounting points for the suspension, engine and drive train; and
 - 41.2.3 Structural soundness that will with stand the rigors of racing.
- 41.3 The minimum specifications for the materials used to the chassis and frame of Saloon classes are:-
 - 41.3.1 Round Tubing: Minimum 38 x 2 mm
 - 41.3.2 Square Tubing: Minimum 38 x 38 x 2 mm
 - 41.3.3 Roll Cage, Sissy Bars, and all other pipe work on the frame: As per CR 42 below.
 - 41.3.4 MSA ORC may, on terms and conditions it deems appropriate, exempt registered chassis builders from the need to have every vehicle it, the chassis builder, produces inspected.
 - 41.3.5 All silhouettes, frames and roll cages may not be off set.

CR42 ROLL CAGES

- 42.1 The minimum requirements for roll cages in all classes are:
 - 42.1.1 No roll cage may be off set.
 - 42.1.2 The cage shall have four down (vertical) pipes or legs, two of which must be in front of the driver. The other two shall be behind the driver's seat. Four horizontal pipes fitted at the top of the down pipes shall join the four down pipes to each other.
 - 42.1.3 Two cross braces must be fitted, one in front of the driver, above the steering column, and one behind the driver, supporting the back rest of the seat. This brace shall be just below the shoulder of the driver when seated and shall support the seat belt / harness so that the belts would pull the driver down in to the seat. Should the seat have belt slots the bar shall be mounted at the exit point of the slots.
 - 42.1.4 The roll cage must be reinforced as follows:-
 - 42.1.4.1 Two rear ward facing, down wards loping pipes that mount from the top of the cage to the floor, wheel arch or chassis shall be fitted; and
- 42.2 A cross pipe, that triangulates (from left to right or right to left, top to bottom as viewed from behind the vehicle) either the roll cage down posts or the rear ward facing down ward sloping pipes, shall be fitted. This pipe is in black on the attached drawings.
- 42.3 All joints and seams in the construction roll cage are to be properly mitred (see diagram in regulation CR 29 above) and shall be welded as follows:-
 - 42.3.1 When original, conventional factory built road or semi-space framed vehicles are used
 - 100% in all cases are able areas provided that a gusset is fitted where joints cannot be fully welded; and
 - 42.3.2 When a purpose built chassis is utilized - 100%.

- 42.4 The Roll cage itself as described in regulation must be constructed of the following materials:
- 42.4.1 Cold rolled tubing with a minimum diameter of 38 mm and a minimum wall thickness of 2 mm.
- 42.4.2 The additional obligatory bracing, as described in regulation CR 42.1.4 above as well further specified bracing shall be of:-
- 42.4.2.1 Pipe with a minimum diameter of 33 mm and a minimum wall thickness of 2 mm; or
- 42.4.2.2 Square tubing with a minimum width of 33 mm and a minimum wall t thickness of 2 mm.
- 42.5 All piping between the various mounting points and joints shall be completely straight, except for the front down pipes or legs of the roll cage which may be shaped in accordance with the profile of the front window, as seen in side elevation. In such case they shall be straight between the floor and the cross brace above the steering wheel and between that brace and the upper horizontals.
- 42.6 Additional cross pipe bracing may be added to the cage.
- 42.7 The piping of the cage, constructed as an integral part of a purpose built chassis, maybe shaped to provide a close fit to the body shell. Such cages shall have all the elements of the above chassis as well as additional, triangulated, bracing to reinforce the cage. This bracing is especially required where the cage may have lost some of the strength due to the bends made to obtain a closer fit.



The above sketches are courtesy of the FIA web site and depict the acceptable style of cross bracing (the black pipe) for roll cages. Obviously these drawings assume proper base plates and welding.

CR43 SIDE IMPACT PROTECTION (“SISSY”) BARS

- 43.1 Two sissy bars, fitted horizontally, on the inside of the two front doors, must be fitted between the two down pipes or legs of roll cage and affixed to the roll cage.
- 43.2 The sissy bars must be a minimum of 50 mm apart. A minimum of one vertical support pipe, in the centre of the sissy bar is compulsory. The sissy bar may not protrude past the roll cage down bars. The sissy bar shall preferably follow the contour of the door, especially on the driver’s side.
- 43.3 Sissy bars shall be fitted in such a manner that the competitor's hips and knees are completely protected when he is strapped in to his seat. In order to achieve this the top horizontal bar must be in the middle of the door, as measured from the floor sill to the bottom of the window aperture. The sissy bars must be constructed so that the internal / external bumper of a competing vehicle would collide with the sissy bar in the even to fat T-bone type collision.
- 43.4 The sissy bar shall have two vertical supports, welded or bolted to the sill or the chassis, spaced so that they divide the area between the back of the seat and the front lower corner of the driver’s side door in to three equal areas.
- 43.5 The sissy bars may be replaced by across 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 cross over point.

CR44 GLASS – WINDOWS AND LIGHTS

- 44.1 All windows, except the front windscreen, shall be removed for vehicles competing on tar.
- 44.2 Windscreens are not permitted on dirt. At least one brace running from the top to the bottom of the window aperture, with a minimum diameter of 20 mm (round pipe), 25 mm X 3 mm Flat bar.
- 44.3 If window or windscreens are fitted, only laminated windscreens will be permitted with additional duct tape or metal brackets securing the four corners being compulsory. No cracked windscreens will be allowed if visibility is in anyway affected.
- 44.4 All glass and /or plastic indicators or lights shall be removed from the body of the vehicles that participate in racing where contact is permitted. They may be retained for non-contact racing but shall be properly secured.
- 44.5 The rear side windows may be replaced with side-panels of clear Lexan or poly carbonate. The panels must however remain transparent, without sign writing or advertising, other than the competitor's surname and a regional or club logo. The number may not be fitted here.

CR45 COOLING SYSTEMS

- 45.1 Radiators shall be mounted within the engine compartment of vehicles participating in tar events.
- 45.2 The radiators of vehicles participating in dirt events may be moved within the engine bay or may be mounted elsewhere provided that:-
 - 45.2.1 The fitment of the radiator does not obscure the driver's rear ward or sideways vision;
 - 45.2.2 The fitment of the radiator would not hamper the extraction of the driver from the vehicle in the event of an accident and shall be screened as set out in CR-A 32.2 above;
 - 45.2.3 All piping to and from the radiator, other than the joints and the over flow pipes shall be of steel. The pipes must be mounted on the floor between the fire wall and the radiator. All joints are to be enclosed by a rubber sock and all hoses are to be double clamped or cladded.
 - 45.2.4 The radiator is covered on three sides with the open side being the side furthest from the competitor.
 - 45.2.5 Steps are taken to ensure that the water and steam associated with ruptured pipes or radiators vent down wards and away from the competitor.
- 45.3 No on board radiator spraying, for cooling purposes, is permitted.

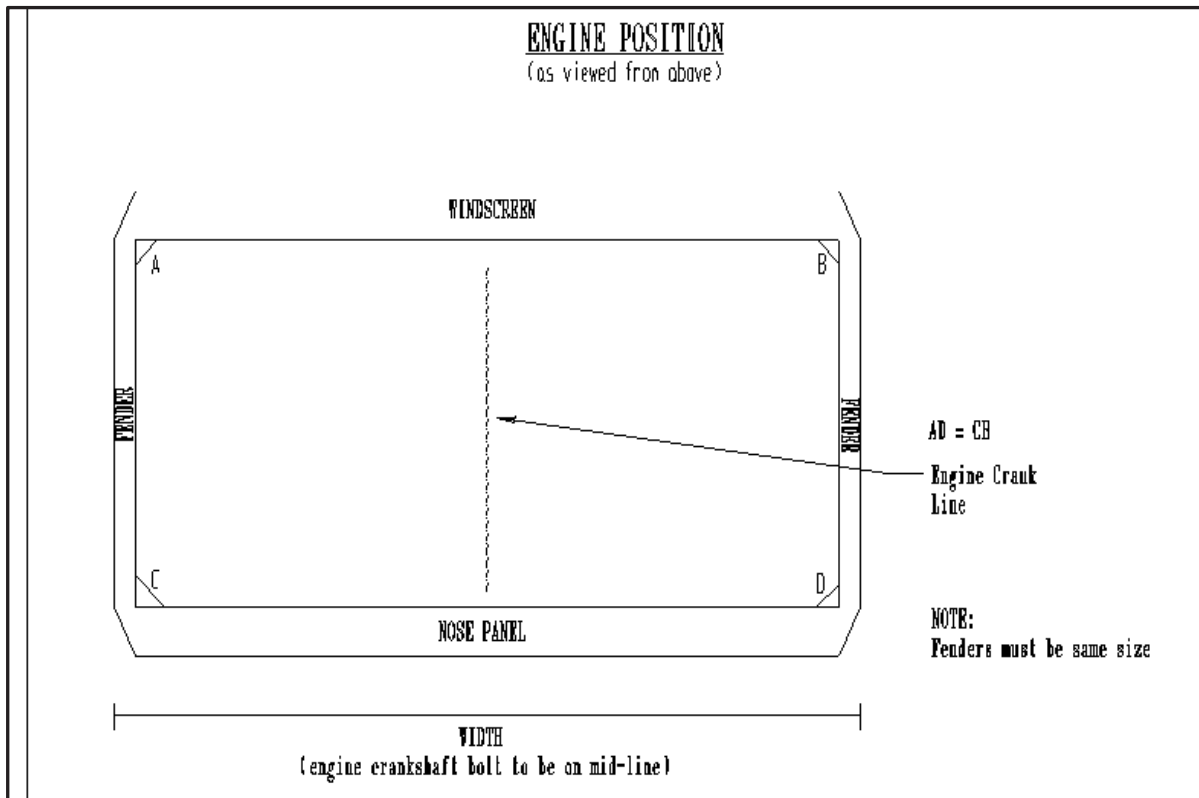
CR46 TRACK / WHEELBASE / ENGINE PLACEMENT

- 46.1 Track and wheel base are free within the confines of what is allowed in terms of suspension regulations and restrictive class regulations. However all four wheels of the car must fit within the body of the car, which in turn must comply with the maximum dimensions of the vehicles asset out in the appendices for the three classes. No part of the vehicles may be outside the total width and length as published. Competitors are urged to take special care of the outside front wheel of their car when checking for compliance with this rule.
- 46.2 Engines may be tilted (by up to 20° from standard) provided all other position regulations are complied with.
- 46.3 Due to the difficulties in obtaining a true measuring point the placement of the engine will be measured from the centre line of the wheel base. Each of the class regulations will

specify the forward distance between the centre lines of the wheel base to the lower front edge of the bell housing. The calculation would be made as follows.

EXAMPLE CALCULATION (all measurements in cm)	
Wheel base of particular vehicle (average of two sides).....238.00
Therefore 50% of wheel base.....119.00
Add forward distance per individual class rules.....78.00
Subtotal.....197.00
Deduct tolerance.....-5.00
Minimum distance from axle centre line to the lower front edge of the bell housing.....192.00

- 46.4 In all front engine, rear wheel drive applications the centre of the crank shaft shall be on the centre line of rear wheel drive vehicles. A tolerance of 50 mm is permitted. See sketch below for means of measurement.



Wheelbase is the horizontal distance between the centre of the front wheel, and the centre of the rear wheel.

CR47 WINDOW NETS

47.1 Window nets are optional. If fitted they shall comply with the following regulation.

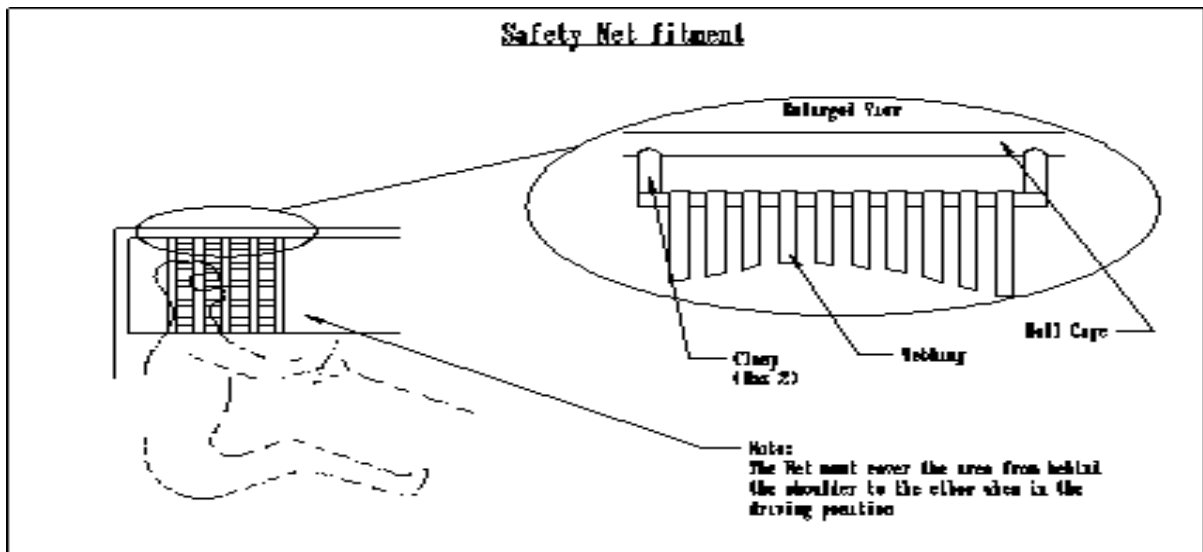
47.2 Window nets shall be made of either:-

47.2.1 Non inflammable webbing with a minimum width of 25 mm and a maximum width of

35 mm that has been properly woven and stitched together in a block pattern, with gaps of no more than 75 mm; or 47.2.2 Non-inflammable cord with a diameter of 2 mm that has been properly knotted together with gaps of no more than 60 mm.

The woven cord shall be stitched into webbing or other suitable material and affixed to the vehicles via properly reinforced eyelets.

- 47.3 Window nets shall cover:
 - 47.3.1 The full window area from top to bottom
 - 47.3.2 From the edge of the seat at the driver's shoulder to his elbow, measured with the driver seated at the controls with his hands on the steering wheel.
- 47.4 The net shall
 - 47.4.1 Be firmly mounted into place using suitable using luggage clips;
 - 47.4.2 Mount to the roll cage and sissy bar in the window space—top and bottom
 - 47.4.3 Not be affixed to the release mechanism by parcel elastic, ropes or cableties.
- 47.5 When a safety net is installed, it must still be possible to open / remove the door or remove the safety net in an emergency. Safety nets are not compulsory.



CR48 BRAKE LIGHT

- 48.1 The brake light shall be operational at all times.
- 48.2 One rearward facing red brake light must be fitted in the rear window space. The lens of the light shall be at least 50 mm in length or diameter and must be intact. The lights may be replaced by a non-flashing LED of at least 200 mm in length.
- 48.3 The brake lights / tail amps must operate by a standard pedal operated switch. No other switches or modifications are allowed. The bulbs must be effective.
- 48.4 As a general rule brake lights may not be fitted in the body work of the vehicle.
- 48.5 Care must be taken during the installation of the lights in order that flickering and malfunction may be minimized.

CR49 WHEEL AND BODY PROTECTOR

- 49.1 A wheel and body protector, fitted between the front and the rear wheel at sill height, may be fitted.
- 49.2 The wheel and body protector shall be straight. In other words it may only curve inwards once at each end when it mounts.
- 49.3 The thickness of material used must not exceed 2 mm. The protector may not protrude more than 30 mm beyond the wheel and must **be flush** with the body work.
- 49.4 All leading and trailing edges to be smooth and angled back to the sill unless incorporated into the wheel arch.
- 49.5 No straight round pipe sections are permitted, as these must be rounded back to the chassis / mounting point.

CR50 RESERVED

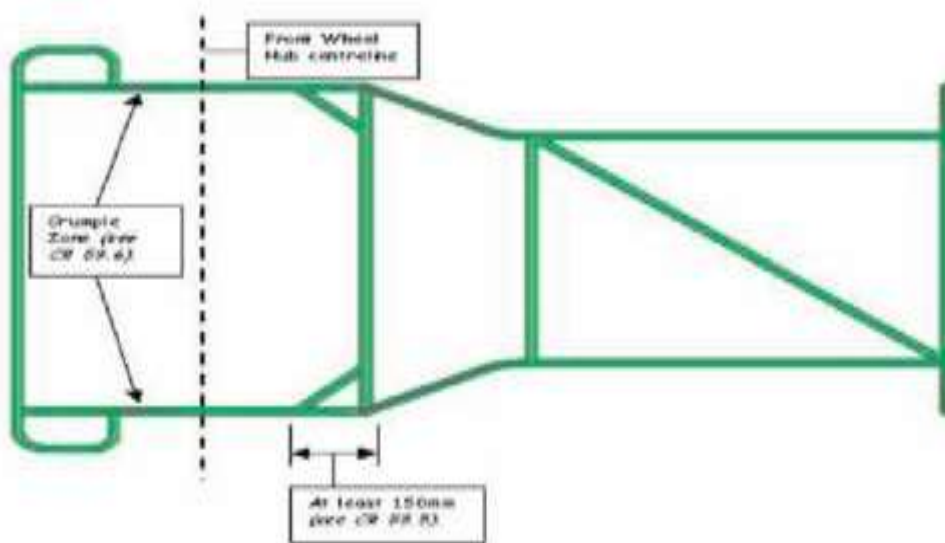
CR51 RADIATOR PROTECTION

- 51.1 All vehicles shall be allowed a radiator protection bar that may be fitted either above or below the bumper if the radiator is fitted in the front of the vehicle, ahead of the engine.
- 51.2 The bar shall have no more than 4 mounting points.
- 51.3 The bar may in addition form an integral part of the radiator cradle and / or the bumper system.
- 51.4 The bar and all mounting pipes shall be made of round pipe with a maximum size of 38 x 2 mm.

CR52 GENERAL BUMPER REGULATIONS

- 52.1 Bumpers are considered to be an integral part of the structure of the vehicle and are compulsory. Please refer to the attached sketches.
- 52.2 The horizontal element of the bumper shall be 30 cm above ground level for tar and 35 cm above ground level for dirt. In each case a 2.5 cm tolerance either way will be allowed.
- 52.3 The bumper shall have a single horizontal pipe. Unless otherwise stated in the class regulations the bumper shall be mounted with two pipes that mount on to or form part of the vehicle's chassis. The ends of the horizontal pipe shall be rounded off and shall be mounted back onto the same chassis element.
- 52.4 The design of the bumper support between the roll cage and the wheel hubs (as referred to above) is free. The bumper may not be connected to the roll cage uprights unless the support structure complies with the triangulation requirement below. Bumpers may be connected to the four roll cage uprights. The bumper itself may not mount to the horizontal roll cage pipes on the driver's side of the vehicle. It is against regulation that the bumper mounting must be braced where it mounts onto the roll cage.
- 52.5 The bumper mounting pipes must be triangulated. The triangulation for the front of the vehicle shall be to the horizontal brace of the roll cage. In the rear of the vehicle the triangulation shall be to brace bar fitted between the two mounting pipes. The triangulation shall connect to two points at least 150 mm away from the 90° joint to the brace pipes. The triangulation shall be between the roll cage down pipes and the wheel hubs. The support may be braced vertically in space frames and semi space frames.
- 52.6 The path of the bumper mounting pipe may be broken by the suspension turrets.
- 52.7 All bumpers shall be constructed in accordance with the specifications for each class.
- 52.8 The bumper mounting pipes may not exceed the thickness of the roll cage pipes they mount onto.
- 52.9 The scrutineer, technical consultant and the Race Controller may, as a body, instruct the removal of any bumper arrangement that is regarded as being beyond the spirit of the regulations.
- 52.10 No dual bumper systems are allowed. In other words – If contact is permitted in the class to be raced an election must be made between fitting an internal bumper or an external bumper, but not both!
- 52.11 Bumpers must have rounded ends. No sharp points or edges are allowed.
- 52.12 All elements of the chassis shall end 100 mm inside the body work, front and back. Unless otherwise stated only the bumpers and the wheel and body protectors may be hard up against the inside of the body. The chassis may not be used as or be part of a bumper system.
- 52.13 No bumpers may be reinforced with gussets. The main bumper pipe may have a body mounting plate attached to it. No additional reinforcing shall be permitted.
- 52.14 No standard, original equipment steel bumpers are allowed.
- 52.15 The only material used for the construction of the bumpers, their support pipes and mounting points **SHALL** be round tube with a maximum OD of 38 mm having a maximum wall thickness of 2 mm.

General Bumper Regulation (see CR53): Top View



- 52.16 Bumpers must be fitted and fashioned in such way that it is possible for a scrutineer to check compliance with these regulations. Similarly all cosmetic covers that are constructed over any portion of the bumpers or their support pipes shall be capable of removal for the purposes of scrutiny.
- 52.17 Bumpers may not be connected extended to form wheel arch protections as these are expressly prohibited. As wheel arch protection pipes are not permitted it follows that bumpers cannot mount to them.
- 52.18 All vehicles are allowed to fit plastic or fibre glass bumper covers to improve the aesthetic appearance of the vehicle, subject to the following:-
- 52.18.1 A single original non-metal or replica bumper cover is permitted front and back.
 - 52.18.2 Replica covers from another vehicle may also be used.
 - 52.18.3 The cover shall be the original manufactured plastic bumper cover or it shall be a replica made of fiberglass.
 - 52.18.4 The cover shall not be reinforced and shall not be more than 4 – mm thick and shall be removable.
 - 52.18.5 The cover must be properly secured to the internal bumper of space frames / semi space frames and shall be fitted with standard bumper brackets and the standard stiffener in original road going vehicles. In the latter case additional bolts on to the stiffener / body / brackets must be introduced to prevent loss of the bumper.

CR53 INTERNAL BUMPER REGULATIONS

- 53.1 The horizontal element shall be placed within the verticals pacing zone of the vehicle's original bumper.
- 53.2 The bumpers shall be shaped in accordance with the shape of the vehicle and shall be mounted flush against the inside of the body.
- 53.3 The bumpers shall be allowed to mount to the chassis of the vehicle and do not require bolts.
- 53.4 The triangulated construction of the chassis shall end at least 100 mm away from the bumper.
- 53.5 It is recommended that a body panel / bumper cover mounting plate is fitted to the bumper bar.
- 53.6 It is highly recommended that competitors take steps to aid the swift removal of the ends of the bumper bars in the event of them being pushed on to the wheel.

CR54 EXTERNAL BUMPER REGULATIONS – CLASSES PARTICIPATING CONTACT RACING

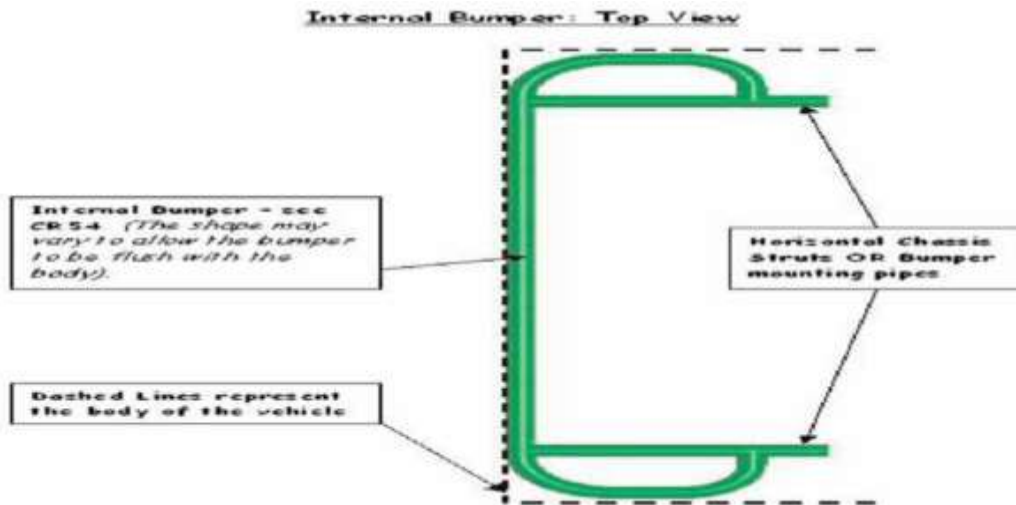
- 54.1 These bumpers are only permitted on vehicles participating in races where contact is allowed.
- 54.2 All bumpers must be attached to their mounting and support pipes by bolts or by welding. The bumper must be connected to the mounting pipe as specified by means of a flange.
- 54.3 The space between the bumper and the body work, measured from the nearest point of the body to the inside of the bumper may not exceed 50 mm, front and back of the vehicle. The maximum space measured, as above, shall be 30 mm in respect of the sides of the vehicle.

Vertical spacing zone of internal bumper:

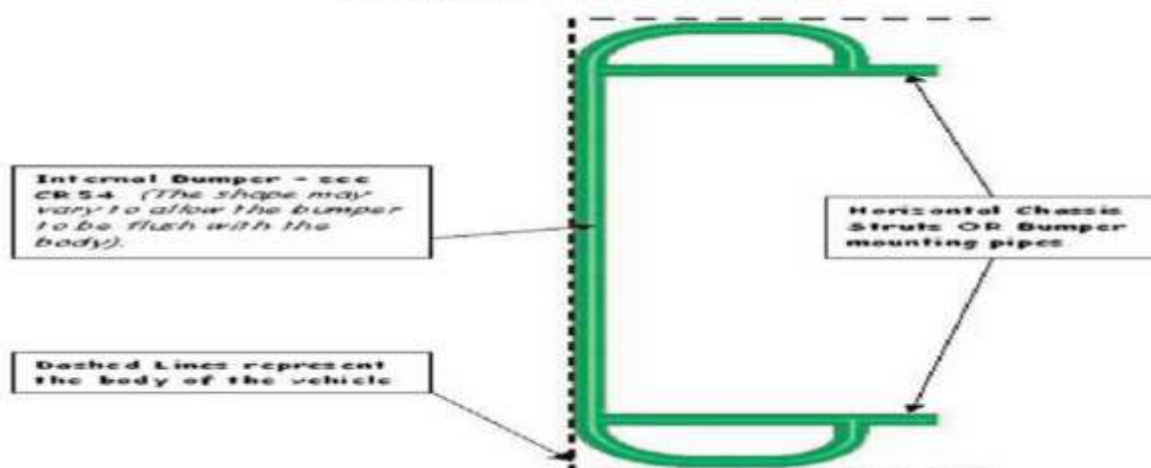


Do Class regulations stand on their own?

The class regulations are not stand alone regulations—in each case the general vehicle regulations, the engine building regulations and the safety standards apply. In respect of saloon classes the general saloon regulations also apply. Micro midgets and Junior Midgets are sufficiently different to warrant their own regulations.



Internal Bumper: Top View



WHAT APPLIES IF THERE IS A CONTRADICTION?

While every effort has been made to avoid conflicting regulations the following shall apply in the event of a conflict between the various regulations:-

- If the conflicting regulations concern a performance related issue the specific class regulations will apply;
- If the conflicting regulations concern the way an engine is built the relevant engine building regulations will apply; and
- If the conflicting regulations concern safety class regulations will defer to the safety standards, then the construction regulations and then the general regulations will apply.

In order to clear up any confusion between Dirt and Tar based racing it is specifically stated that all these regulations apply equally to both facets of oval racing. Where a whole class exists only on one or the other facet the regulations will say which facet it applies to. Where the class is active in both facets the facet specific regulations will be clearly marked in CAPITAL LETTERS, directly after the numbering.

WHAT ARE THE SO CALLED VARIABLE REGULATIONS?

This is a section that is found at the end of each class. These variable regulations deal with matters such as weights and tyres that could be changed to address performance issues in the classes.

INTERPRETATION OF REGULATIONS AND SPECIFICATIONS

The following GCR is the basis to interpreting all the regulations that apply to motorsport.

GCR226 states: In interpreting motorsport regulations and specifications “what is not specifically per- mitted is disallowed” is the normal concept in keeping with the French regulations on which all motor sporting regulations are based. 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 word in of the regulations and shall pay no attention to any claim as to what the regulations were intended to mean.+