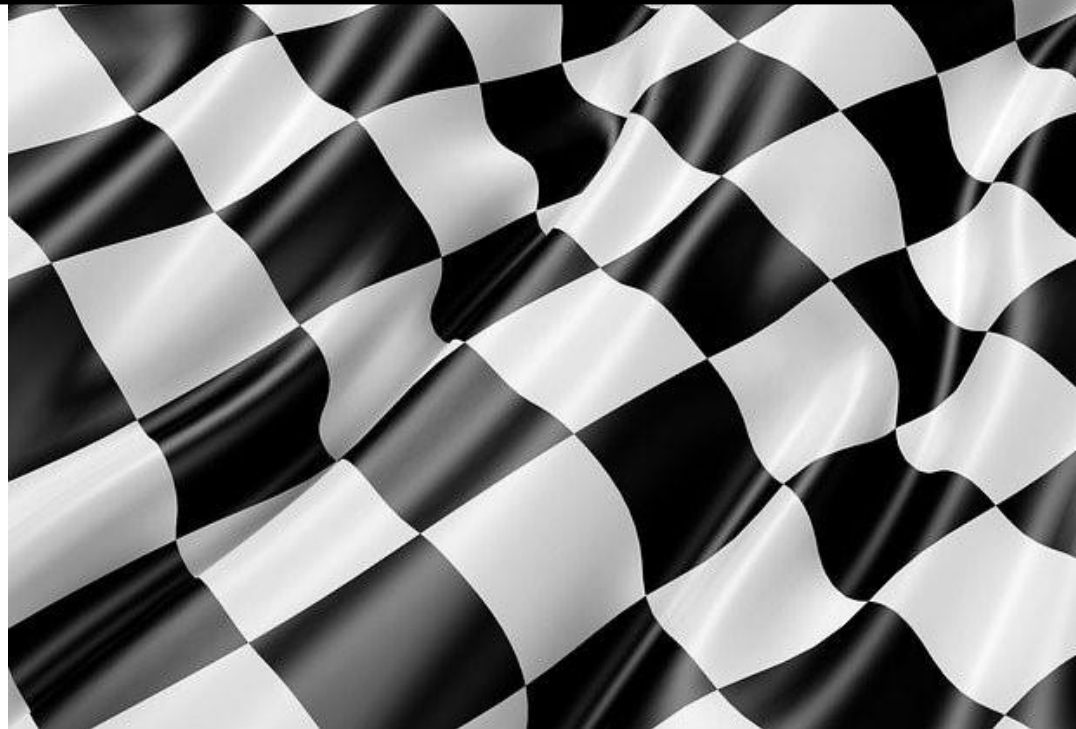




2024

Standing Supplementary Regulations
SA Endurance National Championship Series



Version 1

1 January 2024



REVIEW AND AMENDMENTS

Amendments and updates to the rules will be recorded in the Amendment Record, detailing the updated version, date of approval of the amendment and a short summary of the amendment. Items marked with a solid vertical black line are rules that have fundamentally changed from the previous year’s regulations. |

AMENDMENT RECORD

<i>Modified SSR / ART</i>	<i>Date applicable</i>	<i>Date of Publication</i>	<i>Clarifications</i>

REGULATIONS AND SPECIFICATIONS FOR THE 2024 SAE SOUTH AFRICAN ENDURANCE CLASS

In addition to the Supplementary Regulations issued for various events, these rules and regulations will apply as if they form part of said Supplementary Regulations:

1. Eligibility

- 1.1. The 2024 SAE South African Endurance Class is open by invitation to Production Saloon cars produced in the last five years, Production Sports Cars, GT Cars and Sports Racing Cars, all being closed wheel vehicles complying with technical regulations as published by MSA, the FIA or as determined as eligible by the Organisers from time to time.
- 1.2. Drivers are required to hold the minimum of an MSA National Driver’s Licence to compete in the SAE class in the South African Endurance Series. All new competitors must have previous regional racing experience in order to compete in the SAES Championship. The organiser reserves the right to reject/accept an entry based on previous racing experience (or lack thereof)
- 1.3. The aim of the Series will be to declare an overall SAE National Champion and an overall SAE National Index of Performance Champion and National V8 Roadster Champion. |
- 1.4. Class winners will be as listed in rules 6.1, 6.2, 6.3, and 6.4.
- 1.5. Teams need to register and pay an administrative fee with the promotor to be eligible to enter and score points in the championship. |
- 1.6. Drivers will be graded into a tier structure with the approval of the series promoters: -
 - Tier 1** for drivers entering the entire championship (or have achieved at least 1 MSA approved National Circuit Racing Champion in the past 6 years, applications to be made in writing),
 - Tier 2** for drivers only entering at least 3 rounds (includes the last round of the championship),
 - Tier 3** for drivers entering less than 3 rounds.

1.7 Only Tier 1 and Tier 2 drivers are permitted to enter the final round of the championship. The organisers reserve the right to admit a Tier 3 driver onto the grid of the nine hour after receiving and approving a written application to the CEO of the series accompanied with a comprehensive motorsport CV and motivation to participate. The CEO's decision is final, and no further protests or appeal will be permitted.

2. Events

The Calendar for the 2024 South African Endurance Series as issued by MSA is:

Circuit	Domicile	Distance	Date
1. Kyalami	Midrand	4 Hour	9 th March
2. Zwartkops Raceway	Pretoria West	3 Hour	27 th April
3. Aldo Scribante	Port Elizabeth	5 Hour	01 st June
4. Redstar Raceway	Mpumalanga	4 Hour	03 rd August
5. East London GP Circuit	East London	4 Hour	28 th September
6. Kyalami	Midrand	9 Hour	30 th November

3. Entries

- 3.1 The entry fee for events is R2500.00 per advertised hour of event duration.
- 3.2 All entry fees include the published practice sessions,
 - 3.2.1 MSA fees,
 - 3.2.2 Tier 1 drivers receive 14 Annual Accreditation Access Cards,
 - 3.2.3 Tier 2 Drivers receive 10 Access Arm Bands per event,
 - 3.2.4 Tier 3 Drivers receive 8 Access Arm Bands per event.
- 3.3 An Additional fee of R1000 will be levied for transponder hire where a team does not have its own SAES approved transponder installed in the car.

3.4 **Entry fees must be paid to:**

Southern Africa Endurance Series (PTY) LTD

Bank: First National Bank

Acc No: 6292 060 3645

Branch: 250-655

Reference: The First Drivers Name and car Number to be placed as the reference.

Note: Proof of payment must be sent to accounts@saeseries.com

The entry and closing dates for entries will be advised before each event.

4. Teams and Drivers

- 4.1 The following formula will be applied to determine the minimum time of race distance any one driver needs to drive during any SAE race.
For a **minimum** % of the **total advertised race length**, calculated as follows:

Total race duration (time) in minutes divided by the number of drivers entered Plus 1 (for calculation purposes).
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Example 1:

9 Hour race (5 registered drivers);

540 minutes / 6 (5 drivers + 1) = 90min (16,6%) minimum per driver

Example 2:

9 Hour race (3 registered drivers);

540 minutes / 4 (3 drivers + 1) = 135 min (25%) minimum per driver

Example 3:

3 Hour race (2 registered drivers);

180 minutes / 3 (2 drivers + 1) = 60 min (33,33%) minimum per driver

Example 4:

4 Hour race (2 registered drivers);

240 minutes / 3 (2 drivers + 1) = 80 min (33,33%) minimum per driver

Example 5:

5 Hour race (2 registered drivers);

300 minutes / 3 (2 drivers + 1) = 100 min (33,33%) minimum per driver

Failure to comply with this minimum time per driver shall result in a penalty calculated by subtracting 3 laps per minute shortfall from the team's total number of laps for up to a total of 5 minutes (i.e., a total of 15 laps). Should a team exceed the 5 minutes total shortfall per driver the team will lose all finishing place points and will gain only 1 point for finishing the race. Should a driver suffer a mechanical breakdown or any other misfortune during a race, the time taken to recover and or repair the car will be included in that driver's total time.

NOTE: Where a race is scheduled to run a portion of the race distance in either Nautical or Civil Twilight, it will be mandatory that all drivers run under such conditions, need to participate in at least 25% of the allocated mandatory night practice session set up the day before for that event.

- 4.2 Each Entry must have a Team Manager who may not be a driver. This generally will be the person who registers the team with the promoters prior to entering the event.
- 4.3 A driver may drive for only one entry during an event.
- 4.4 An Entry may be comprised of a maximum of 5 drivers, 1 Team Manager and 5 Pit crew. Additional persons may be utilised within the pit garage at the team's own circuit entry costs.
- 4.5 Should a team withdraw before qualifying in the race, another team may nominate a change of previously entered driver prior to qualifying taking place. Such approval can only be approved by the stewards of the event.

5. Tyres

5.1. The DUNLOP tyre brand is the only tyre brand permitted in the Southern African Endurance Series. The number and size thereof are free in all Classes except where a sub-set of class regulations document other type or size of tyre be used.

NOTE: Any competitor believing that Dunlop do not or cannot stock or supply the required tyre for their race car MUST make written application to the series promoters, supplying an email confirmation from Dunlop that this is the case. In such instances the promoters will not unreasonably prevent the competitor from participating in the round of the championship where Dunlop are unable to supply. This will not be the case if the competitor only make Dunlop aware of the problem just prior to the event in question.

6. Classes

Classes are based on the declared capacity on the entry form.

6.1 Sports Racing Cars:

- **Class A: (Open Class) MSA National Championship**

Open to all modified cars with an engine capacity above 1400cc and approved by the organisers. Capable of achieving a lap time within 103% of the previous year's pole position / fastest lap time.

6.2 Production GT Cars:

- **Class B: (GT3 & 4)**

Cars complying in spirit with FIA GT3 & GT4 regulations as determined by SAGTRA in all respects of the Balance of performance parameters.

6.3 Saloon Cars

- **Class C:**

All cars (saloon) exceeding 3000cc with manufacturer produced forced induction engines.

- **Class D:**

All cars with engine capacity between 900cc to 3000cc – Restricted and on application to the promoters. Slick tyres may be used.

6.4 Production Sports Cars:

- **Class E:** All sports cars with engine capacity between 2000cc to 3999cc – Typical Backdraft and NASH cars.

6.5 National V8 Roadsters: MSA National Championship

- **NOTE:** The Backdraft Cars will run a National Championship class called the National V8 Roadster Championship inside for Backdrafts complying with the attached Appendix F below. The SAES will apply the Backdraft Championship Regulations and re-score the Backdraft Championship post each race weekend's events.

6.6 1-Hour Dash

- Open to all modified cars with an engine capacity above 1400cc and approved by the organisers. Capable of achieving a lap time within 120% of the previous year's **Class A** pole position / fastest lap time.

6.7 The Index of Performance: MSA National Championship (Applicable to all classes listed above). Target lap time-based championship as scored in 7.3 below.

NOTE: The SAES organisers retain the sole right to determine which cars fall into which class at all times.

6.8 The penalty for a false declaration will be exclusion from an event.

6.9 Vehicles with forced induction and all Rotary engine vehicles will be subject to an equivalency factor of 1.4 by which their actual capacity will be multiplied to determine a capacity for classing purposes. Forced induction Rotary engine cars will be subject to an equivalency factor of 2.0

7. Scoring

7.1. The championship comprises of 6 events, as per point 2 above. A competitors 5 best scoring rounds count towards the championship. Only an event entered in and where a competitor has taken to the circuit at the beginning of the actual race may drop his worst scoring round for championship scoring purposes.

7.2 Points will be awarded as per Appendix B1 of these regulations. Class positions are determined by the points scored in the overall championship, carried over to the class table.

7.2 For inclusion in the Overall, Index and Class Championship scoring, a driver must have finished and scored in not less than three rounds of the current Championship. Such deletions from the championship log will start after round 4 of the championship.

- 7.3 **The Index of Performance** target lap time is determined by taking the two fastest laps set by a car during a race and dividing the total of those two fastest laps by 2 to achieve a smoothed target lap time. This time is then used to calculate which entry came closest to its overall race time based on the target time.
- 7.4 All events of more than 5 hours (5) Hours advertised duration shall score double the points as listed in Appendix B2 of these regulations.

8. Trophies per Race Meeting

Overall and Index of Performance: 1st overall, 2nd overall & 3rd overall
(4th & 5th overall for double point races)

Classes: 1st, 2nd & 3rd placed, with the **provisor** that a minimum of 6 entries per class or more are received on closing of entries, failing this, only 1st placed will receive a trophy.

9. Qualification as a Finisher

- 9.1. A vehicle must cross the finishing line under its own power on the circuit after the chequered flag has been shown to qualify as a finisher. A vehicle may not be pushed at any time by any means during an event except by track officials except where the vehicle has reached the pit entry line and may be pushed by personnel authorised to be on the pit lane.
- 9.2. A vehicle must complete 75% of its class winner's race distance to qualify as a class finisher.
- 9.3. Race distance will be defined as the number of laps completed by the leading vehicle in each class. Should there be only one vehicle or should only one car in a class finish, the organisers will determine a class race distance based on 75% of a race distance calculated by using the historical lap times of a car in that class.
- 9.4. The Pit Lane Exit will close 5 minutes before the end of the race. This closing time will be based on the official timekeeper's time and not subject to a visual aid to determine the closure.

10. In-car timing and Data Logging

In car timing and data logging is permitted and will become compulsory for the 2025 racing season.

11. In-car communications

In car communication (ship to shore) is compulsory in all classes.

12. Qualifying

- 12.1. Qualification times will only be taken from the official qualifying session for the event. Only one driver is required to qualify a vehicle unless otherwise advised in the event SRs.
- 12.1.1 For race meetings that host a Double-header round (2 rounds on one weekend), the second race on the weekend will use the best lap of the first race to determine the grid for the second race. (Note: If there is a driver change between race one and two, only the lap times of the drivers that raced in the first race of the weekend will be used to determine grid position for the second race).**
- 12.2. Vehicles failing to qualify in the official session will start from the back of the grid on condition they attained a lap time within 120% of the Pole Position time earlier in the weekend. The order in which cars start at the back of the grid, should there be more than one such competitor, will be determined by the CoC with preference given to the competitor who achieved a higher finish in a previous race.

- 12.2.1 To avoid doubt, the qualifying times achieved for the SAGT race 1 will be used as the qualifying times for the 1-Hour SA Endurance race for SAGT competitors.
- 12.2.2 In the event of sufficient entries being received (SAGT), the promoters reserve the right to combine the qualifying into one session (SAGT & SAE).
- 12.3. On the grounds of safety, A minimum qualifying time will be applied as follows:
 - 12.3.1 It is required that the SLOWEST driver in a team wishing to enter the endurance class must obtain at the very least one lap with a time inside of 120% of the previous year's pole position / fastest race lap time (whichever is the quicker) to be pre-Qualified to be allowed to participate in the endurance race. Note: should the team as a whole have qualified at previous events, and they have taken on a new driver into the team. That new driver will be the classified "Slowest" driver for pre-qualifying session.
 - 12.3.2 Should the slowest driver fail to pre-Qualify, the team may either nominate another driver OR withdraw that driver from their line-up in order to qualify.
 - 12.3.3 For the first round of the Championship, the pre-qualifying time will be set at 130%, with the second round of the Championship pre-qualifying time set at 125%. This is designed to allow new competitors or returning competitors with new equipment the option to tweak things when entering the championship.
 - 12.3.4 Drivers / Cars failing to Pre-Qualify will automatically be placed in the Challenge 120 class. This class is established to allow slower cars to race together for line honours on the day. They will get to practice separately and race in 2 heats on the weekend. The duration of these heats will be run at a race distance of 45 minutes plus 1 lap. 50% of the team's race entry will be refunded to the teams who entered and paid in full for the SAE class on the day.
 - 12.3.5 LCQ (A Last Chance to Qualify) for Challenge 120 competitors to enter the SAE class the following day will be permitted for those who have been placed in Challenge 120 class for practice and qualifying per the qualifying run. This will apply to drivers who achieve the 120% entry criteria to enter the SAE class.
 - 12.3.6 All final decisions on Pre-Qualifying will be at the sole discretion of the CoC.
- 12.4. Competitors are to ensure that transponders are fitted to their vehicles from the first practice session of the event. Competitors venturing onto the circuit without a transponder will be black flagged.

13. Safety Car

- 13.1 A Safety Car will be used as described in Appendix E of these regulations.
- 13.2 Pit stops are allowed during a Safety Car intervention period, except for the last five minutes of the race when the pit lane is closed and when the safety car is entering the start finish line zone, where the pit lane will be closed for this short period to allow all trailing cars to past the pit exit.

14. Red Flag

- 14.1 Vehicles will be stopped on the circuit start grid in race position unless stated otherwise by race the Clerk Of the Course.
- 14.2 Drivers may take personal refreshments during a red flag stop but must remain in the vehicle.
- 14.3 A vehicle may not be worked on during a red flag stop, but windscreens, radiator or visors may be cleaned of debris.
- 14.4 Vehicles may not enter or exit the pits during a red flag stop.
- 14.5 A TWO-minute board will be shown to signal a rolling restart behind a safety car.
- 14.6 The order of restart will be the order at which the drivers were running the lap before the red flag came out.

15. Fuel

- 15.1. A maximum of 120L on board fuel capacity is permitted unless a car has a greater fuel capacity as homologated by the FIA. Entrants must supply the organisers with the relevant FIA Homologation Document or Number to verify the fuel capacity of the car.
- 15.2. Only Petrol and Diesel based fuels as specified by MSA GCR240 are allowed. Octane boosters specified as in GCR240 are allowed. Any other form of fuel MUST receive written approval of both MSA and the SAES organisers.
- 15.3. Entrants not complying with any part of Rule 15 **refer to Appendix G.**

16. Refuelling

- 16.1. Only refuelling equipment as specified in Appendix A of these regulations may be used.
- 16.2. A maximum of 5 crew members may be involved in the refuel of a car whilst the car is on Pit Road only at any times before or during an event.
- 16.3. Drivers may remain in a vehicle or conduct a driver change during refuelling. Only a fully cladded crew member or driver attired as per rule 16.7 may assist in the changeover of an incoming or outgoing driver.
- 16.4. Each entry must have a minimum of five 9kg dry powder or equivalent fire extinguishers. Four of these must be placed within easy reach of the refuelling crew on the pit lane and the fifth, with its safety pin deactivated, must be held by a crew member, and faced towards a refuelling operation. All fire-extinguishers must carry a current sold by date or a current service date.
- 16.5. The vehicle engine must be shut down during refuelling and may not be started until refuelling is complete.
- 16.6. A wet blanket must be placed over the wheel or exhaust area closest to the vehicles fuel intake point. The blanket must be of suitable size to cover the vehicle wheel or exposed exhaust area.
- 16.7. All refuelling crews shall be attired with a fireproof balaclava, fireproof gloves and a fireproof overall or suit approved by the series scrutineer. In addition, the crew holding the refuelling nozzle and also the crew holding (if used), an overflow or splash bottle shall wear a full-face crash helmet with the visor lowered.
 - 16.7.1 All crew eligible to work on the car in the pitlane shall be always attired with a minimum of a Level 1 **fireproof** overall as well as a balaclava and gloves.
- 16.8. The refuelling crew shall be comprised of one crew member holding a readied fire-extinguisher as in 16.4; one holding the refuelling device and one manning the shut off valve on the refuelling rig, if used. The shut off valve must always be manned during the refuelling process.
- 16.9. No refuelling is allowed in the Pit Garage, under any circumstances over the entire race meeting.
- 16.10. No work of any nature is allowed on the vehicle whilst it is being refuelled.
- 16.11. Vehicles may be refuelled by gravity feed only.
- 16.12. Bulk fuel (i.e. 200 litres) may not be stored in the Pit Garage or Pit Front at any time.
- 16.13. The refilling of fuel rigs with electric pumps is not permitted unless the equipment complies with FIA standards otherwise only manual, or air pressure pumps may be used.
- 16.14. No booms may cross the pit lane at a height of less than 1.90 meters.
- 16.15. Fuel spillage of any nature will subject the vehicle to a drive through penalty.
- 16.16. All cars must be connected to an earth point whilst refuelling.
- 16.17. Contravention on any of the above items will be penalised **as per Appendix G.**

17. Pit Lane

- 17.1. Only 5 technicians (Car Crew) can work on a car whilst it is stationary in front of the Pit Garage on Pit Lane.
 - 17.1.1 Drivers and Team Managers may be part of the 5 technicians but not in addition to.

- 17.2 A maximum of 2 crew may be present on the pit wall. These will be identified and accredited separately at the beginning of the event.
- 17.3 Wheels may be changed on the Pit Lane.
- 17.4 Fluids and lubricants may be checked and topped up on the Pit Lane.
- 17.5 No mechanical or electrical work may be carried out on the pit lane except brake pads and rotors may be changed in the pit lane. Brief checks may be carried out, but should other work be required the vehicle must be pushed into its pit garage before any work can commence. Contravention of this rule **refer Appendix G.**
- 17.6 Vehicles may not be push started during the race. **Refer Appendix G.**
- 17.7 Vehicles leaving the pit area may be assisted with a push by crew if it is attempting to pull off under its own power.
- 17.8 The Pit Lane Officer only will enforce any instructions received from the C.O.C.
- 17.9 The Pit Lane Officer will only communicate with the Team Manager
- 17.10 The event organiser reserves the right to appoint multiple Pit Lane Officers for any given event.
- 17.11 The pitlane speed will be indicated in the Supplementary Regulations for each event. Failure will result in a default pitlane speed of 50km/h.

18. Pit Garage

- 18.1 Car engines may be started in the Pit Garage with the sole intent of removing the car from the pit garage.
- 18.2 There is no restriction on how many people may work on a car in a Pit Garage.
- 18.3 No fuel may be stored in the Pit Garage.
- 18.4 No smoking, alcohol, or children under the age of 16 (sixteen) is/are permitted in the Pit Garage at any time.
- 18.5 If any major components are changed during the race approval must be obtained from a Scrutineer to re-join the race after inspection of the repair.
- 18.6 Only persons wearing the appropriate accreditation may enter the pit garage or pit service apron during an event.
- 18.7 All cars must use an environmental mat when in the pit garage or the pit lane as per Appendix D of these regulations.

19. Pit Wall

- 19.1 When the pit lane entrance is open only persons carrying a "Pit Wall" accreditation lanyard are allowed on the pit wall area during a race, free practise, and qualifying sessions. No person under 16 years of age is permitted on the pit wall.

20. Race Start and Finish Procedure

- 20.1 Race starts will be conducted by way of a rolling start unless otherwise stated in the event SRs.
- 20.2 The Pit Lane will be opened Fifteen Minutes, or as specified otherwise in the event SRs, prior to the scheduled start of the race.
- 20.3 The pit lane exit will close Five minutes before the official race start and will reopen at the race start or unless otherwise directed by the CoC.
- 20.4 GCR272 (iii) will not be applied for the last lap of the race.

21. Outside Assistance

- 21.1 In the event of a vehicle breaking down on the circuit, no outside assistance is permitted other than by the track officials who may move the vehicle to a safe position or position the vehicle for towing the vehicle back to the pits. Such assistance may be used to restart the engine.

- 21.2 A vehicle may only be returned to the pit area by means of it being towed behind a support vehicle by means of a tow strap. A roll back or trailer may be used to return the vehicle to the pits during a race if directed by race officials.
- 21.3 Only the driver is permitted to make repairs outside of the designated pit area during a race. No assistance may be given by any third party outside of the confines of the circuit demarcated areas. Should a driver abandon or leave a car on circuit the car is deemed as retired and may not be retrieved for repair at a later stage.
- 21.4 No refuelling or replenishment of fluids or lubricants is allowed on the circuit.
- 21.5 The penalty for non-compliance, refer **Appendix G**.

22. Lighting

- 22.1 All vehicles will be required to have the following lights operating at scrutineering and at the start of an event as per 22.2, 22.5, 22.6 and 22.7. A minimum of one of each of these lights shall be operational during the event.
- 22.2 Two operating Headlamps mounted in their original positions or as per 22.4. A headlamp may contain a multiplication of elements within the same housing. The headlamp lenses may not be covered.
- 22.3 A maximum of two additional front facing spotlights may be fitted.
- 22.4 Unless original equipment, no front facing lamp, as in 22.2 and 22.3 above, may be fitted so that the top of the lamp protrudes above a line drawn from the front of the cockpit area or the base of a wind screen to the highest forward part of the car's bodywork forward of the cockpit area with the exception of Lotus Seven type vehicles which may have their headlamps fitted in their traditional position. Any extra lamps as in 22.3 on this type of vehicle must be fitted lower than the two headlamps. No lamp may exceed 200mm in lens diameter or length.
- 22.5 Two operating tail lamps is mandatory.
- 22.6 One operating Brake Light is mandatory.
- 22.7 Front and rear working indicators as and if originally fitted to the vehicle.
- 22.8 A maximum of two small forward facing recognition lights may be fitted. These may be of any colour except Red. If strip lights are used, they may not be more than 150mm in length.
- 22.9 Lights must be turned on when advised by race officials by way of a LIGHTS ON board which will be displayed at the start line for 3 Laps.
- 22.10 Vehicles which do not display the operating lights as specified in Rule 22 will be black / orange flagged (Technical Flag) during an event and must return to the pits to repair any faults or damage.
- 22.11 No additional light may be added to a vehicle during an event.
- 22.12 No rear facing white coloured light is permitted.
- 22.13 Additional high visibility reflective tape may be required (front, back and both sides) as deemed necessary by the clerk of course.
- 22.14 If the officials receive complaints that a specific teams lights are too bright and is affecting other cars it approaches, the competitor will be warned to adjust the said lighting configuration to a more acceptable brightness on the grounds of safety. Failure to comply will see the car given a technical Black and Orange flag where they will be forced to pit and rectify the problem before rejoining the race.

23. Communications and Timing

- 23.1 All events will operate as an online internet-based system and there will be no paper records.
- 23.2 Teams must be equipped with the necessary Laptops, PCs etc to log onto the internet or relevant wi-fi to follow the progress of the event and to receive instructions.
- 23.3 Screens will update as soon as the system allows.

- 23.4 In the absence of an onboard transponder with a variable driver switch, each driver shall have a separate timing transponder which must be changed at every driver change during practice sessions and the race.
- 23.5 Transponders must be fitted to the actual car and may not be fitted to a driver's helmet or body.
- 23.6 The event timing/timekeeper will be indicated in the published Supplementary Regulations (SR) unless otherwise notified via an official bulletin.
- 23.7 The official timing will be the timekeeper's clock.
- 24. Car Recognition**
- 24.1 A vehicle will retain the same number for a season. The number 1 (one) is reserved for the previous seasons **Overall National Championship winner and 10 is reserved for the previous seasons Index Of Performance National Championship winner.**
- 24.2 It is compulsory to fit a decal either side of a vehicle showing each driver's name and each drivers Country of Domicile.
- 24.3 Each car required a Letter in front of their number indicating their class.
- 24.4 The organisers reserve the right to fit sponsors decals to a car.
- 24.5 The championship leader in each class (after round 1) may display the race number with a Red background and white number. This will be referred to the "Red Plate".
- 25. Silencing**
- 25.1 It is compulsory that cars do not exceed an exhaust noise level measured and set as per SAES Appendix C. Silencers are not compulsory fitment.
- 26. Tow Straps**
- 26.1 All cars must be fitted with front and rear tow hooks or straps. Should a tow point not be available during a recovery the recovery crew will attach their towing equipment to any convenient point on a car and any ensuing damage will be for the responsibility of the entrant.
- 27. Drivers Apparel**
- 27.1 All drivers' apparel must be presented at scrutineering for examination. Race suits must comply with a minimum LEVEL 3 as specified in MSA GCR239. GCR239 will apply to all safety items.
- 28. Bodywork**
- 28.1 Cars may not take part in a qualifying session or a race without any part of the bodywork as presented at scrutineering, or with repairs allowed by the scrutineers.
- 29. Documentation & Scrutineering**
- 29.1 Documentation, scrutineering and qualifying will take place on Friday before the Qualifying of each event unless advised otherwise in the event SRs.
- 29.2 Failure to attend Drivers Briefing by the Team Manager and all drivers, **refer to Appendix G.**
- 30. Administrative Checks**
- 30.1 During preliminary administrative checks all entrants must have all the required licenses and documents as required by the organisers. Amongst which:
- a) Entrant's and Driver's competition licenses.
 - b) MSA authorisation in accordance with art. 3.9.4. of International Sporting Code if it is not included with the driver's competition license.

- c) medical insurance if not included with the driver's license.
- d) Parental authorisation when the driver is under 18 years of age.

31. Safety Harnesses / Belts

- 31.1 Full compliance is required as required under **GCR 239 D**.
- 31.2 For SA GT competitors competing in the SAE series, refer to the safety harness regulations applicable to GT3 and GT4 competition cars under the **Standing Supplementary Regulations SA GT Racing Association National Championship**.

32. Rollover Structures

- 32.1 Roll cages and their construction must comply with GCR 239 C read in conjunction with Appendix J of the FIA Articles.
- 32.2 Teams must ensure full compliance with GCR 239 C 3.1 and 3.2 and that such requisite is checked against their tallest competitor in the driver team.
- 32.3 The responsibility to prove such safety compliance rests solely with the team manager.
- 32.4 It is permitted to add material to the rollover structure to ensure compliance with GCR 239 C 3.1 and 3.2
- 32.5 Scrutineers may conduct random checks throughout the event to ensure compliance with GCR 239 C.
- 32.6 Competitors found to be in breach of any part of article 32 while on the circuit will be shown the black and orange flag by the clerk of the course.

SA Endurance Series

Appendix A

Refuelling Systems

A. FIA Approved Single and Twin Nozzle Systems

The refuel systems must carry a current FIA Label of Approval as per Appendix 252-7 which is available on the FIA website as a download. **It is the responsibility of the entrant to prove that the system is FIA approved.**

B. Non-FIA Approved Fuel Rigs with a standalone Tank

1. Only a single refuelling hose of a maximum of 38mm I.D. may be used.
2. The fuel delivery hose to the car must be fitted with a shutoff nozzle with a maximum of 33mm I.D. at its exit into the car fuel tank entry port.
3. All hosing used must be to S.A.B.S fuel hose standards. The onus rests with the competitor to produce such evidence that the pipes are S.A.B.S approved when asked by the relevant official.
4. The maximum refill storage tank capacity is 200L.
5. The top of the storage tank may not be higher than 2000mm from the ground.
6. The maximum diameter of the fuel storage may not exceed 1000mm.
7. The fuel storage tank must be fitted with a vent pipe on top of the storage tank. The vent pipe shall be of a minimum 13mm internal diameter and 1000mm in length. The top of the vent pipe will be fitted with a flame trap.
8. A manually operated shut off valve shall be fitted between the outlet hose or pipe directly at the tank.
9. The fuel rig must be earthed at all times via a minimum 10mm earthing cable.

C. FIA and Other Approved Fuel Churns

1. FIA approved, and other churns supplied manufacturers which are SAES approved may be used.

D. Non-FIA Approved Fuel Churns

Non-FIA approved by SAES may be used as long as they meet the requirements of SAES Scrutineers as follows:

1. The churn may not hold more than 30L
2. The churn outlet nozzle must be a minimum length of 200mm, and the internal diameter of the delivery nozzle may not exceed 33mm.
3. The churn must be fitted with a shut off valve on the delivery hose.

No other fuel systems will be allowed unless approved by SAES scrutineers.

E. GTC Series Approved Refuelling Systems

1. Dry-Break refuelling systems as approved by the controllers of the MSA GTC Series and as approved by SAES officials may be used.

SA Endurance Series Appendix B

Points scoring for Events of between 3 and 5 Hours advertised duration will receive the points of **table B1**.
 Points scoring for Events of greater than 5 Hours advertised duration will receive the points of **table B2**.

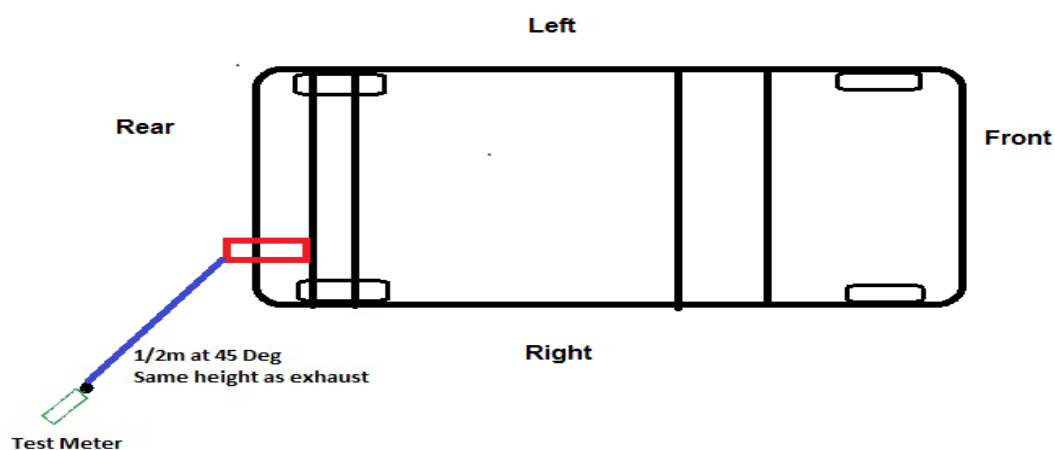
Appendix B1		Appendix B2	
Position	Points	Position	Points
1	50	1	100
2	45	2	90
3	41	3	82
4	38	4	76
5	35	5	70
6	33	6	66
7	31	7	62
8	29	8	58
9	27	9	54
10	25	10	50
11	24	11	48
12	23	12	46
13	22	13	44
14	21	14	42
15	20	15	40
16	19	16	38
17	18	17	36
18	17	18	34
19	16	19	32
20	15	20	30
21	14	21	28
22	13	22	26
23	12	23	24
24	11	24	22
25	10	25	20
Finish	5	Finish	10

Points allocated for events or combined heats of longer than 5 hours advertised combined duration shall be double those of 5-hour or less events.

SA Endurance Series Appendix C

SOUND MEASUREMENT

- 1.1 The measurement of sound levels will be made by placing the microphone at 50cm from the end of the exhaust pipe at a 45° angle and at the level of the exhaust outlet.
- 1.2 In the case of rear engine Sports and GT cars, the same test procedure as above may be carried out by placing the microphone at a distance of 2m from the end of the exhaust pipe at a 45° angle and at the level of the exhaust outlet.
- 1.3 Where more than one exhaust outlet is present on the machine, the test must be repeated for each exhaust outlet and the highest reading will be the representative reading.
- 1.4 In circumstances where the exhaust outlet is not immediately available or accessible, the test may be conducted at 2 meters from the centreline of the vehicle with the microphone at the same height as the exhaust outlet.
- 1.5 Background noise should be at least 10 dB (A) below the measured level. It is necessary that there is a minimum of 20 meters radius open flat space around the vehicle. Where possible, measurements must be taken as close as possible to the vehicle, at the defined distance to avoid background noise.
- 1.6 The static sound level limit at is 108dBA at the ½m test and 99dBA at the 2m test.
- 1.7 A drive by sound test may be conducted at a maximum sound level of 96dBA.
- 1.8 Engines must be revved to 75% of the maximum (red line) limit for the test.



SA Endurance Series Appendix D

Environmental Mats

1. Environmental mats must be composed of an absorbent upper part (top) and an impermeable part underside (bottom). Use of mats (or other effective ground protecting devices/systems) is compulsory wherever work on vehicles is allowed by the organisers.
2. The whole area underneath the vehicle, where there is the prime probability of fluid spills, must be covered with a ground protecting sheet or environmental mat.
3. In combination with the environmental Mats or ground sheets (but not as a replacement or alternative), other ground protecting systems like fluid absorbent material, oil spill kits, etc. can be used to clear spillages. These materials must be disposed of in a hazardous waste container.
4. Under no circumstances may these mats be disposed of in a standard refuse bin. A hazardous waste container must be available at a designated point. Any damaged mats MUST be disposed of in this container. Alternatively, the soiled mats can be placed in a sealed plastic container for disposal by a hazardous waste disposal company.
5. For use on a concrete, tiled or closed surface a non-absorbent groundsheet is considered adequate for use as an environmental mat.
6. If required, absorbent environmental mats are available from MSA offices.

SA Endurance Series Appendix E

Safety Car Procedures

The basis for this document is a speedy reaction to and recovery of broken race cars during open practice, qualifying and endurance race conditions.

1. The Safety Car and a Course Car are deployed from the Pit Lane exit by the CoC for an incident. The Course Car will depart immediately for the incident area with the circuit under full course yellow conditions with all SC Safety Car boards displayed. The Safety Car will pick up the LEAD Car of the event as it approaches the Pit Exit area and will proceed onto the circuit holding position in front of the LEAD car. Should the lead car have pitted the next following car will be deemed as the lead car.

The Course Car officials will decide in conjunction with the CoC by radio communication if the incident requires a recovery of vehicle/vehicles to the pits or the vehicle/vehicles are to be abandoned from the event and moved to a place of safety.

The SC will proceed around the circuit and may pass the CC & RV when it re-enters the circuit to return to the pit area.

2. The SC will only switch off its lights for a restart when the RV and CC have entered the pit area under instruction from the CoC.
3. The SC boards will be removed once the SC has exited the circuit and no car may overtake another prior to the Start/Finish line where a green flag will be waved.
4. Cars that have entered the pits during the SC period may only re-join the circuit at a safe pace and proceed to the back of the SC "train". Should the SC "train" be passing the pit lane exit when a competitor wants to exit the pit lane the competitor must be held until the last SC "train" car has passed the pit exit and then released.
5. Should the pit straight area be blocked by debris from an incident, the SC may use the pit lane to avoid that section of the circuit during the SC period at the discretion of the CoC.
6. Once the SC lights have been switched off competitors may not weave behind the SC but must maintain a single line of vehicles until the restart.
7. Should the SC come up behind a slow-moving competitor during the SC period that competitor must be taken as a slow-moving vehicle with a white flag displayed by the marshals, and it must take up position at the rear of Safety Car "train" after being passed by the SC and all other competitors.
8. Cars must proceed at a safe pace to catch up to the SC and form a train behind the SC.
9. Cars leading the SC train may not accelerate and or pass the SC until the SC has left the circuit.
10. Non-compliance with any of the above by competitors **refer to Appendix G.**

SA Endurance Series 2024 Appendix F

South African National V8 Roadster Championship

Aim of the National V8 Roadster Championship

The aim of this championship is to declare a National V8 Roadster Champion for 2024. This championship runs concurrently and within the SA Endurance National Championship Series (SAES) and points will be awarded per appendix B of these regulations. Backdraft Racing (BDR) shall be responsible for the technical administration of the Championship, subject to MSA protocol.

Eligibility of Vehicles

This class is open to all Backdraft Roadster Production Cars constructed by the TR-Tec facility at Prospecton Kwazulu-Natal for this championship. A roof (with its ancillary fitment attachments) as supplied by BDR may be fitted. It is the competitor or entrant's responsibility to ensure the competitor's vehicle is compliant.

No modifications or deviations are permitted unless specifically provided for in these regulations.

Refer GCR 226 – **"what is not specifically permitted is disallowed"**.

Notwithstanding GCR 176 any technical infringement found during a technical inspection following a qualifying session or any race will result in exclusion. Documentation showing the compliant parts fitted to the car may be obtained from BDR.

Where cars are not compliant due to missing parts as a result of accident damage the Clerk of the Course and Technical Consultants may use their discretion – which is not protest able. The normal penalties which apply to exclusion will apply.

The Controllers reserve the right to amend, alter or introduce additional regulations if deemed necessary during the course of the championship. Any such amendment, alteration or additional regulation will only come into force once published in an official MSA bulletin/circular.

1. Engine specifications:

- 1.1 All engines will be Lexus V8 1UZ-F motors refreshed and supplied by the TR-Tec facility at Prospecton Kwazulu-Natal. As the engines will be the property of the competitor general maintenance will remain their responsibility. Should BDR become aware that an engine or any component has been sent to a non-approved engine builder or engineer, BDR reserves the right to remove the engine and/or component from the builder or engineer and replace the engine and insist that the replacement engine is fitted to the competitor's car.
- 1.2 All engines are sealed and may not be opened. All repairs must be undertaken by TR-Tec or a service provider designated by them in writing.
- 1.3 The engine is controlled by a Dictator management system. Mapping is free but the designated RPM limit of 6200 revolutions per minute may not be exceeded. RPM limits will be checked by the officials and exceptions will be penalized in terms of GCR 176.
- 1.4 An engine Oil Cooler may be fitted.
- 1.5 Teams are responsible for the freight of replacement engines to and from TR-Tec.
- 1.6 A power steering fluid cooler may be fitted.
- 1.7 Engine Crankshaft pullies may be changed from the original 145mm diameter to 100mm diameter pulley supplied by TR-Tec.
- 1.8 No other changes may be made to engine ancillaries or air intake systems.

2. Gearbox specifications:

- 2.1 Only gearboxes supplied or rebuilt by TR-TEC may be used in the vehicle.
- 2.2 The gearbox must be a BMW 5 Speed Diesel Gearbox.
- 2.3 All gearboxes **must** be built and or rebuilt by TR-Tec or a service provider designated by them in writing.

3. Differential specifications:

- 3.1 A limited slip type differential with a ratio of 3.46:1 is fitted.
- 3.2 Differential ratios may not be changed unless otherwise specified.
- 3.3 All differentials are sealed and may not be opened unless otherwise specified.
- 3.4 All differentials **must** be built and or rebuilt by TR-Tec or a service provider designated by them in writing.
- 3.5 An oil cooler with a maximum of 40 rows may be fitted to cool differential oil. Ducts for the cooler may be cut in a line directly behind the driver's seat. Rectangular duct holes may not exceed 200mm x 50mm and round duct holes may not exceed 100mm in diameter. A maximum of 4 of 75mm holes may be made in the boot lid to assist with oil cooler air flow

4. Suspension specifications:

- 4.1 All suspension components are supplied by TR-Tec and may not be changed to any alternate component unless visually the same and of the same dimensions as the original TR Tec supplied parts. with the exception of 4.5 below.
- 4.2 Stabiliser Link Arms front and rear may be rose-jointed.
- 4.3 Camber, castor, and toe settings may be adjusted within the range allowed by components supplied and no mounting points may be changed.
- 4.5 Dampers must remain as supplied by TR-Tec and may not be changed.
- 4.6 Spring rates and dimensions are free subject to the spring fitting its original position. A threaded locating tube (to enable ride height adjustments) may be fitted to the rear of the chassis to enable different rate springs from the original to be fitted. The ride height specifications in 4.7 below must in all cases be complied with.
- 4.7 Minimum ride height must remain within 25mm above or below the standard front ride height of 130mm as measured at front end of the lower chassis rail and 180mm as measured at the rear end of the lower chassis rail.

Minimum Front: 105mm Maximum Front: 155mm

Minimum Rear: 155mm Maximum Rear: 205mm

- 4.8 The front stabiliser bar link arms may be replaced with solid or rose jointed arms.

5. Brakes:

- 5.1 All brake components as supplied by TR-TEC may not be changed unless otherwise specified.
- 5.2 Brake Pads are free at the competitor's own cost.
- 5.3 Brake calipers may be changed as long as all dimensions and design remain as per the original BDR part.
- 5.4 Braided brake hoses may be fitted.
- 5.5 Brake cooling ducts may be fitted to existing holes and vents. No additional holes may be made unless otherwise stipulated.

6. Fuel System:

- 6.1 A vent tank of no more than 5 litres may be fitted to prevent fuel spillage at pit stops. The vent tank may not be fillable via a cap and only one inlet and one outlet pipe is allowed.
- 6.2 A swirl pot of no more than 2L capacity may be fitted. The original fuel pump may be replaced by a lift pump and a pressure pump. The preference is for Bosch pumps so that spares may be carried in the spares truck.
- 6.3 No modifications may be made to the fuel tank and the positioning thereof.
- 6.4 Refueling to take place per SAES championship regulations Appendix A. TR-TEC will supply compliant refueling equipment.

7. Exhaust System:

7.1 The exhaust headers must remain as supplied by TR-TEC. The remainder of the exhaust is free, but compliance with article 25.1 of these regulations is required.

8. Wheels and Tyres:

8.1 9-inch rims on the front and on the rear (with the spacer kit supplied by TR-TEC) are to be utilised. It is permitted to use 9-inch rims in front and 10.5 rims on the rear.

a) Front: Dunlop Direzza DZ03G H1 265/35/R18 on 9-inch rims

b) Rear: Dunlop Direzza DZ03G H1 295/30/R18 on 10.5-inch rims

9. Mass & Dimensions:

9.1 The cars minimum weight without driver is listed at 1000kg. Cars may be measured randomly for conformity immediately after each qualifying practice session and at any other time as decided by race officials.

10. General:

10.1 Additional instrumentation may be fitted after approval by BDRat the cost of Competitor.

10.2 Built in fire extinguishing systems may be fitted.

10.3 The battery may be relocated.

10.4 All changes to these regulations will be communicated to competitors via numbered, written bulletins.

SA Endurance Series Appendix G – Penalties

Penalties applicable:

1. Fuel

- Entrants not complying with any part of Rule 15 will be excluded.

2. Refuelling

- Contravention on any of the items in Rule 16 will be penalised by penalties of up to and including exclusion from the event.

3. Pit Lane

- Contravention of Rule 17.5 and 17.6 will be a drive through penalty.

4. Outside Assistance

- The penalty for non-compliance of any part of Rule 21 is exclusion. Unless a satisfactory reason is accepted by the CoC.

5. Documentation & Scrutineering

- Failure to attend Drivers Briefing by the Team Manager and all drivers will result in a stop-go penalty of 5 minutes for the Team concerned within the first five laps of the race, unless permission has been received in advance by the CoC for not attending.

6. Safety Car Procedures

- Non-compliance with any of the Safety Car Procedures by competitors may result in a drive through penalty.
- A Drive Through or Stop and Go penalty cannot be carried out once the Safety Car has been called or the red flag has been shown for the suspension of the race.

7. Technical Regulation Breach

- Any breach of the technical regulations as specified in Appendix F will be penalised in accordance with GCR 176.