2025

SOCIAL STANDING SUPPLEMENTARY REGULATIONS

BACKDRAFT ENDURANCE SERIES

Version 1

27 August 2025

REVIEW AND AMENDMENTS

Motorsport South Africa (MSA) will periodically review these rules and will present the revised version to all members for agreement to publish the updated version.

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.

AMENDMENT RECORD

Modified SSR / Art	***Date Applicable***	***Date of Publication***	***Clarifications***

1. Rules and Regulations

a. All cars must conform to MSA safety standards.
b. All cars must have logbooks and Scrutineering forms
c. All cars will run on Dunlop Semi Slicks
d. Track will be open for practice and qualifying on Fridays
e. Warm up will be on Saturday morning followed by the Race
f. Transponders will be issued to all drivers from the timing office
g. All Drivers to have MSA approved Helmets and Race Kit
h. To be classified as a finisher a competitor must complete 75% of the laps completed by the winner of his class
i. Any team not up to date with payments or documentation will not be allowed on track to practice.
j. Each team entered must have a manager who is not a driver and be in possession of an MSA Entrants licence.
k. The series is open to competitors who comply in terms of MSA Circuit Racing SSR1.

2. Scoring

a. The events in 2025 will consist of 2 Rounds – 13th September East London and 13-14 December Cape Motor Festival 9 hour Killarney. No champion will be declared for 2025.
b. The Index of performance target lap time is calculated by taking the 2 fastest laps set by a car during the race and dividing the total of those two 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.
c. Minimum driving time per driver per car is 25% of Race duration
d. A car must cross the finish line under its own power to be classified as a finisher.

e. A car must complete 75% of its Class winners race distance to qualify as a finisher.

3. **In-car timing and Data Logging**

a. In car timing is and data logging is permitted.

4. **In-car communications**

a. In car communication (ship to shore) is compulsory in all classes. When Radio's fail it is the responsibility of the Team Manager to communicate with his team.

5. Qualifying

a. 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.

b. Vehicles failing to qualify in the official session will start from the back of the grid. Should there be more than one such competitor positions will be determined by the CoC.

6. Safety Car

a. A Safety Car will be used as described in Appendix **E** of these regulations.

b. 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.

7. Red Flag

a. Vehicles will be stopped on the circuit start grid in race position unless stated otherwise by race the Clerk Of the Course.

b. Drivers may take personal refreshments during a red flag stop but must remain in the vehicle.

c. Vehicle may not be worked on during a red flag stop, but windscreens, radiator or visors may be cleaned of debris.

d. Vehicles may not enter or exit the pits during a red flag stop.

e. A TWO-minute board will be shown to signal a rolling restart behind a safety car.

f. The order of restart will be the order at which the drivers were running the lap before the red flag came out.

8. Fuel

a. 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.

b. 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 organisers.

c. Entrants not complying with any part of Rule 15 **refer to Appendix G.**

9. Refuelling

a. Only refuelling equipment as specified in Appendix A of these regulations may be used.

b. 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.

c. 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.

d. Each entry must have a minimum of 2 x 9kg dry powder or equivalent fire extinguishers. One of these must be placed within easy reach of the refuelling crew on the pit lane and the second, 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.

e. The vehicle engine must be shut down during refuelling and may not be started until refuelling is complete.
f. 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.
g. 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.
h. 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.
i. No refuelling is allowed in the Pit Garage, under any circumstances.
j. No work of any nature is allowed on the vehicle whilst it is being refuelled.
k. Vehicles may be refuelled by gravity feed only.
l. Bulk fuel (i.e. 200 litres) may not be stored in the Pit Garage or Pit Front at any time.
m. 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.
n. No booms may cross the pit lane at a height of less than 1.90 meters.
o. Fuel spillage of any nature will subject the vehicle to a drive through penalty.
p. All cars must be connected to an earth point whilst refuelling.
q. Contravention on any of the above items will be penalised **as per Appendix G.**
r. **A Driver change may be done whilst refuelling**

10. Pit Lane
a. Only 5 technicians (Car Crew) can work on a car whilst it is stationary in front of the Pit Garage on Pit Lane.
b. A maximum of 2 crew may be present on the pit wall. These will be identified and accredited separately at the begin of the event
c. Drivers and Team Managers may be part of the 5 technicians but not in addition to.
d. Wheels may be changed on the Pit Lane.
e. Fluids and lubricants may be checked and topped up on the Pit Lane.
f. 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.**
g. Vehicles may not be push started during the race. **Refer Appendix G.**
h. Vehicles leaving the pit area may be assisted with a push by crew if it is attempting to pull off under its own power.
i. The Pit Lane Officer will only communicate with the Team Manager on instructions received from the Clerk of the Course

11. Pit Garage
a. Car engines may be started in the Pit Garage with the sole intent of removing the car from the pit garage
b. There is no restriction on how many people may work on a car in a Pit Garage.
c. No fuel may be stored in the Pit Garage.
d. No smoking, alcohol, or children under the age of 16 (sixteen) is/are permitted in the Pit Garage at any time.
e. 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.
f. Only persons wearing the appropriate accreditation may enter the pit garage or pit service apron during an event.
g. All cars must use an environmental mat when in the pit garage or the pit lane as per Appendix D of these regulations. The environmental Officer only will enforce any instructions

12. Pit Wall

a. When the pit lane entrance is open only persons carrying a Pit Crew accreditation are allowed on the pit wall area during a race, free practice and qualifying sessions.

13. Race Start and Finish Procedure

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

14. Out-side Assistance

a. 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.
b. 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.
c. Only the driver is permitted to make repairs outside of the designated pit area during a race. 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.
d. No refueling or replenishment of fluids or lubricants is allowed on the circuit.
e. The penalty for non-compliance**, refer Appendix G**.

15. Lighting

a. 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.
b. 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.
c. A maximum of two additional front facing spotlights may be fitted.
d. 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.
e. Two operating tail lamps is mandatory.
f. One operating Brake Light is required.
g. Front and rear working indicators as and if originally fitted to the vehicle.
h. 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.
i. Lights must be turned on when advised by race officials by way of a LIGHTS ON board which will displayed at the start line for 3 Laps.
   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.
j. No additional light may be added to a vehicle during an event.
k. No rear facing white coloured light is permitted.

16. Communications and Timing

a. All events will operate as an online internet-based system and there will be no paper records.
b. 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.
c. Screens will update as soon as the system allows.
d. Each driver shall have a separate timing transponder which must be changed at every driver change during practice sessions and the race.
e. Transponders may not be fitted to a driver's helmet.

17. Car Recognition

a. A vehicle will retain the same number for a season. The number 1 (one) is reserved for the previous seasons Series winner.
b. It is compulsory to fit a decal either side of a vehicle showing each driver's name and each drivers Country of Domicile.
c. Each car required a Letter in front of their number indicating their class.
d. The organisers reserve the right to fit sponsors decals to a car.

18. Silencing

a. It is compulsory that cars do not exceed an exhaust noise level measured and set as per AstronEnergy/Backdraft Racing Appendix C as stated in the events regulation. Silencers are not compulsory fitment.

19. Tow Straps

a. 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.

20. Drivers Apparel

a. 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.

21. Bodywork

a. Cars may not take part in a qualifying session or a race without any part of the bodywork as presented at scrutineering.
b. Documentation & Scrutineering
c. Documentation, scrutineering and qualifying will take place on Friday before the Qualifying of each event unless advised otherwise in the event SRs.
d. Failure to attend Drivers Briefing by the Team Manager and all drivers, **refer to Appendix G.**

22. Administrative Checks

a. During preliminary administrative checks all entrants must have all the required licences and documents as
b. required by the organisers.
c. Entrant´s and Driver´s competition licences. A minimum of an MSA social circuit car licence or higher is required to compete.

d. ASN authorisation in accordance with art. 3.9.4. of the FIA International Sporting Code if it is not included with the driver's competition licence. Foreign competitors must apply to MSA for international insurance coverage at least 4 weeks before an event. Medical certification if not included with the driver's licence.

23. Safety Harnesses / Belts

a. Full compliance is required as required under **GCR 239 D**.

b. For SA 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 Super Trophy ~~Association National~~ Club Championship.**

24. Rollover Structures

a. Roll cages and their construction must comply with GCR 239 C read in conjunction with Appendix J of the FIA Articles.

b. 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.

c. The responsibility to prove such safety compliance rests solely with the team manager.

d. It is permitted to add material to the rollover structure to ensure compliance with GCR 239 C 3.1 and 3.2

e. Scrutineers may conduct random checks throughout the event to ensure compliance with GCR 239 C.

f. Competitors found to be in breach while on the circuit will be shown the black and orange flag by the clerk of the course.

Appendixes

Appendix A

Refuelling Systems

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.**

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 33m 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.

FIA and Other Approved Fuel Churns

Non-FIA Approved Fuel Churns

Non-FIA Fuel Churns approved by organisers may be used as long as they meet the requirements of the 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.

Appendix B

Sound Measurement

1. The measurement of sound levels will be made by placing the microphone at 50cm from the end of the exhaust pipe at a 45º angle and at the level of the exhaust outlet.
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 45º angle and at the level of the exhaust outlet.
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.
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.
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.
6. The static sound level limit at is 108dBA at the ½m test and 99dBA at the 2m test.
7. A drive by sound test may be conducted at a maximum sound level of 96dBA.
8. Engines must be revved to 75% of the maximum (red line) limit for the test.

Appendix C

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.

Appendix D

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.**

Appendix E
Competitor's attention is drawn to GCR 226.

Engine **specifications:**

1. All engines will be built at the TR-Tec facility at Prospecton Kwazulu-Natal.
2. All engines are sealed and may not be opened.
3. The engine is controlled by a Dicktator management system and can be mapped according to your requirements. The RPM limit is **controlled.**
4. An engine Oil Cooler may be fitted.
5. Teams are responsible for the freight of replacement engines to and from TR-Tec.
6. A power steering fluid cooler may be fitted.
7. Engine Crankshaft pullies may be changed from the current 145mm diameter to 100mm diameter pully supplied by TR-Tec.

Gearbox specifications:

1. Only gearboxes supplied or re-built by TR-TEC may be used in the vehicle.
2. The gearbox must be a BMW 5 Speed Diesel Gearbox.
3. All gearboxes **must** be built and or rebuilt by TR-Tec

Differential specifications:

1. A n open type differential with a ratio of 3.46:1 is fitted.
2. Differential ratios may not be changed unless otherwise specified.
3. All differentials are sealed and may not be opened unless otherwise specified.
4. All differentials must be built and or rebuilt by TR-Tec.
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
6. Differentials without Limited Slip may be fitted.

Suspension specifications:

1. All suspension components are supplied by TR-Tec and may not be changed to any alternate component unless visually the same as the original TR Tec supplied parts.
2. Stabiliser Link Arms front and rear may be rose-jointed.
3. Camber, castor, and toe settings may be adjusted within the components supplied and no mounting points may be changed.
4. Dampers must remain BDR Dampers as supplied by TR-Tec.
5. 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.
6. 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 18

Minimum Rear: 155mm Maximum Rear: 205mm

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

Brakes:

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

Fuel System:

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.
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.
3. No modifications may be made to the fuel tank and the positioning thereof.
4. Refuelling to take place per SAES championship regulations Appendix A with the refuelling equipment as supplied by TR-TEC.

Exhaust System:

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

Wheels and Tyres:

1. 9-inch rims on the front and 10.5 inch rims on the rear are to be utilised.

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

Mass & Dimensions:

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

General:

1. Additional instrumentation may be fitted after approval by Backdraft Racing at the cost of Competitor.
2. No limitations on pit stops, AstronEnergy/Backdraft Racing regulations are in place.
3. All changes to these regulations will be communicated to competitors via numbered, written bulletins.

Appendix F – Penalties

Penalties applicable:

Fuel

- Entrants not complying may be excluded.

Refuelling

- Contravention on any of the items in the Refuelling procedure as stipulated will be penalised by penalties of up to and including exclusion from the event.

Pit Lane

- Contravention of Pit Lane speed limit may lead to a drive through penalty.
- If vehicle is push started in Pit Lane you will receive a drive through penalty.
- Spillage of fuel in pit lane will receive Drive Through penalty.

Out-side Assistance

- The penalty for non-compliance of any part of this rule is possible exclusion.

Documentation & Scrutineering

- Failure to attend Drivers Briefing by the Team Manager and all drivers will result in a drive through penalty for the Team concerned within the first five laps of the race.

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.

Technical Regulation Breach

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