



2023

KZN Regional Standing Supplementary Regulations

Off Road Cars Championship



Version 1

24 January 2023

Ref: 162912/157

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.

AMENDMENT RECORD

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

REGULATIONS AND SPECIFICATIONS FOR THE 2023 KWAZULU-NATAL OFF ROAD CAR RACING CHAMPIONSHIP

The following are the Standing Rules for the Motorsport SA KwaZulu-Natal Region Off Road Car Racing Championship.

1. CONTROLLERS

The controllers of this championship shall be the Motorsport SA KwaZulu-Natal Regional Motorsport Committee.

2. ELIGIBILITY OF COMPETITORS

- i) Refer to SSR 300 of the 2023 MSA National SSR's for Rally-Raid.
- ii) The Championship is open to competitors from all regions under the jurisdiction of MSA as permitted in GCR 60, however KwaZulu-Natal Regional colours only apply to competitors domiciled in KwaZulu-Natal.
- iii) A competitor who intends to compete for the overall championship must compete in at least 4 events during the championship year to be eligible.
- iv) When drivers share a drive the first nominated driver must race the prologue, to assist organizers with seeding.

3. ELIGIBILITY OF VEHICLES

Refer to SSR 301 of the 2023 MSA National SSR's for Rally-Raid.
See also clause 7 below – Classes and vehicles specifications

4. CHAMPIONSHIP SERIES

- i) The Championship will comprise of seven (7) events, with 6 events to count.
- ii) If due to "force majeure" only six are scored, six will count. If five or less events are held, MSA reserves the right to withhold the declaration of a champion.
- iii) It is planned to have one or two double header events scored as two separate events.
- iv) The Regional Championship will be contested by the two classes as stated in 7 (i) with the minimum total number of cars starting or competing being an average of (6) over the season for the Regional Championship

5. AIM OF CHAMPIONSHIP

- i) To declare a KwaZulu-Natal Off Road Car Racing Overall Driver and Co-Driver Champion

6. SCORING OF CHAMPIONSHIPS

6.1 REGIONAL CHAMPIONSHIP POINTS

- i) Points will be awarded for each event in respect of the number of starters per class as follows

6 or more starters	full points
5 starters	from 2 nd place
4 starters	from 3 rd place
3 starters	from 4 th place
2 starters	from 5 th place
1 starter	from 6 th place

ii) **CLASS POINTS**

1 - 30	6 - 10	11 - 5
2 - 23	7 - 9	12 - 4
3 - 18	8 - 8	13 - 3
4 - 15	9 - 7	14 - 2
5 - 12	10 - 6	15 - 1

- iii) All starters will receive FIVE (5) points for starting the race.
- iv) Where drivers share a drive, they will share points.
- v) For scoring and championship purposes a vehicle, irrespective of whether it is a twin or single seater, constitutes a starter or competitor in a particular class
- vi) Sseparation of ties – refer SSR 320 part 3,4 of the 2023 MSA National SSR's for Rally-Raid.
- vii) Only class and start points will be used to score the regional championship and the driver/ co-driver with the highest points at the end of the season will be declared the winner of the regional championship.

6.2 **COMPETING ORGANISERS**

- i) A crew who intends organizing an event can elect either to compete or not in that event.
- ii) Should they elect to compete in the event they will receive their finishing position points.
- iii) Should the crew elect not to compete in the event they will receive points equal to the average of their best three results of the current year.
- iv) Organisers points are awarded only once to a crew in a championship year.
- v) When submitting the draft regulations to MSA six weeks prior to the event, the names of these organisers, who must be "major players" and who's duties are to be specified, will be submitted to the regional secretary and the Off Road Car Racing representative.

7. **CLASSES AND VEHICLES SPECIFICATIONS**

There will be two regional championship classes and one clubmans class:

i) **Regional Championship Classes:**

Class 'A' – refer to the **2023** MSA National SSRs for Rally-Raid, Special Vehicle Category Part II and Class P special vehicles with aluminium block engines, Class D and E production vehicles as per Addendum A of the KZN Regional SSR's for Off Road Cars, will be accommodated in this class.

Class 'B' – refer to Addendum A of the KZN Regional SSR's for Off Road Cars. Note: Air intake and vehicle mass will remain open. Class P vehicles with cast iron block engines, and Class G (SxS) Special Vehicles will be accommodated in this class. Refer to Special Vehicle Category Part II of the **2023** MSA National SSR's for Rally-Raid.

Note: If a vehicle is catered for in one of the above classes it WILL enter and compete in that class unless it is entered and competing in the Clubmans Classes.

ii) **Non-Regional Championship Classes:**

Clubmans Class – This class is open to all Non-Championship competitors provided the crews and vehicles comply with all GCR's, SSR's and SR's applicable to Off Road Car Racing.

Social Class – This class is open to all Non-Championship competitors provided the crews and vehicles comply with the GCR's, SSR's and SR's applicable to SOCIAL Off-Road Racing. The entrants will be required to sign the appropriate social indemnity documents in regard to inertia reel seat belts, roll bars, etc.

- iii) All new competitors entering Off Road Racing events, will be required to compete in the Clubman's Class for a minimum of 3 (three) events. The Specialist Off Road Committee reserves the right to review this requirement on an individual basis.
- iv) Vehicles may only change class during the year with specific approval of the Regional Specialist Off Road Car Committee.

8. MINIMUM AND MAXIMUM DISTANCES

- i) All events will be planned to have a minimum distance of 200 kilometres with a maximum not exceeding 300km.
- ii) If due to incidents of "force majeure", the minimum distance or number of laps may be reduced by the Clerk of the Course at his discretion
- iii) To qualify as a championship event the minimum distance must be greater than 100 km.

9. ROUTE MARKING

The following is to be read in conjunction with SSR 302.

- i) All changes in direction will be indicated with two warning markers one above the other 100 mm apart, 50 metres before the turn with a second double marker positioned on the turn.
- ii) Where the track turns to the left these markers will be placed on the left side of the road.
- iii) Where the track turns to the right these markers will be placed on the right side of the road.
- iv) A single confirmation marker must be placed on the left of the track within 20 metres after a turn to indicate the correct route.
- v) Where the race route turns off the road and the obvious continuation of that road is not the race route, green 'no go' markers are to be erected to indicate 'wrong route'.
- vi) In sugar cane plantations a directional arrow will be placed on the outside of a corner indicating the angle and direction of the turn so as to minimize any crop damage.
- vii) All markers and arrows are to be positioned in such a way that they are clearly visible to approaching competitors but are not vulnerable to being knocked over.

10. SCRUTINEERING

- i) Self-scrutineering must be done on the day of the event by each competitor and the official scrutineering form completed in full and signed. This document must then be handed in at documentation before the start of the race
- ii) A minimum of 3 vehicles randomly selected by the clerk of the course which list will be available at documentation will be scrutineered by the official scrutineer of the event .
- iii) It is compulsory for all vehicles that have not competed in any MSA sanctioned event for a period of one calendar year or more to be scrutineered by the official scrutineer of the event

11. POSTPONEMENT, ABANDONMENT OR CANCELLATION OF COMPETITION

In the event of a postponement, abandonment or cancellation of a scheduled meeting or a competition forming part of a meeting, the Organisers reserve the right to apply the applicable below stated provision/s:

- 11.1 Postponement – Should an event be postponed prior to the start of the event, and it is possible to reschedule the event to another date, entries already received/lodged for the postponed event will be reallocated to the rescheduled event. If for any reason this is not possible, entry fees may be partially or fully refunded.
- 11.2 Abandonment – Once an event has officially started, refer to GCR 31 and 261, and is abandoned due to Force Majeure or safety concerns, no entry fee refunds will be made.
- 11.3 Cancellation – If an event is cancelled for any reason prior to its start, entries will be partially or fully refunded – refer GCR 244.

Also refer to GCR's 62, 152 vii), 156 vi), 244 and 273 ii).

- 12.** The championship year shall run from 01 January to 31 December of each year.

ADDENDUM A

TO THE 2023 MSA KZN REGIONAL OFF ROAD CAR STANDING SUPPLEMENTARY REGULATIONS

1. CLASS B – SPECIAL VEHICLES: TWO WHEEL DRIVE

1.1 Engines:

- a. Any normally aspirated four-cylinder petrol engine with a cubic capacity of no greater than 2050cc may be used. The engine must originate from any series production car or commercial vehicle that is available from retail engine outlets in South Africa, and the engine must be clearly recognisable as such.
- b. Engine modifications permitted: The original cylinder head, cylinder block and crankshaft must be retained otherwise modifications are unrestricted.
- c. The Nissan SR20 VVL Neo engine may be used.
- d. Rotary engines are not allowed in class B.

1.2 There are no restrictions on chassis, body, suspension in this class, but crew must consist of 2 persons. Single seater Class B vehicles are permitted in Regional Championship racing.

1.3 There are no restrictions on induction air or weight in this class.

1.4 Transmission

Vehicles are restricted to two wheel drive. Gearbox and other drive details are free, but must be mechanical engine to wheel. No electrical, pneumatic or hydro-static drives are allowed. Torque converters are allowed.

2. CLASS D - PRODUCTION BASED VEHICLES WITH CHASSIS, 4 LITRES

NOTE:

Competitors contemplating the purchase or construction of a new vehicle for class D must ensure that the specifications and design is acceptable to the Commission and acceptance has been confirmed in writing and signed by both the Commission President and the Technical Delegate. Refer Art 1.4, 1.5, and 1.6. of the **2023** MSA National SSRs for Rally-Raid.

2.1 Engine

- a. Naturally aspirated petrol engines with four cylinders or more, and a maximum capacity of 4000cc, or alternatively, a Turbo Diesel Engine with a maximum capacity of 3200cc.
- b. All Class D Vehicles must be fitted with Group N specification engines.
- c. The turbo charger fitted to a diesel engine selected must be homologated.
- d. Exhaust manifold and exhaust system is free Refer Art 4 of the 2023 National SSR's for Rally-Raid.
- e. Flywheel to be original, or made of ferrous material only, otherwise free.
- f. Engine mountings are free, however the engine must remain in its original position. The attachment of the mounts to the engine block must be to the standard position.
- g. Cooling systems for engine water, lubrication oil, power steering, gearbox and transmission oil are free, except that the bodywork regulations must be respected. Water radiator must be retained in its original area as in the production vehicle, e.g. in front of the engine.
- h. Air cleaner system and position is free.
- i. Air conditioners and heaters may be removed.

- i. Piggyback, remapped and direct replacement ECU's are permitted. The engine wiring harness, connectors and sensors are free. The air mass sensor is free. The air valve may be enlarged provided it is still housed within the standard throttle body. Refer Art 13.1.10 of the 2023 National SSR's for Rally-Raid.
- ii. No telemetry is permitted. No traction control systems or devices are permitted. Refer Art 13.1.10 and 14 of the 2023 National SSR's for Rally-Raid

2.2 Transmission/Driveline

- a. Drive 2x4 or 4x4.
- b. Clutch and pressure plates are free, but are restricted to a maximum of twin plates. Carbon friction plates are not allowed.
- c. Gearbox may be replaced with any unit from the model range of the vehicle, or a commission approved gearbox. Gearbox mountings are free.
- d. Transfer case may be replaced with any unit from the model range of the vehicle, internals free or a commission approved unit. Transfer case mountings are free.
- e. Axle housings from the same model range as the vehicle may be used including rear housings being used in front and front axle housings being used at rear. Axle housings may be reinforced.
- f. Internal axle components are free, including drive shafts but ferrous materials only.
- g. Prop shafts and centre bearings are free but ferrous materials only.

2.3 Brake System

Standard braking system or disc brakes front and rear from a production vehicle. A Racing pedal box system may be fitted to replace the standard system.

- a. Friction material is free.
- b. Hand brake system is free.
- c. Brake bias valve may be added to the standard system.
- d. Brake tubing / hoses and location free provided the quality is better or equivalent to the original.

2.4 Electrical System

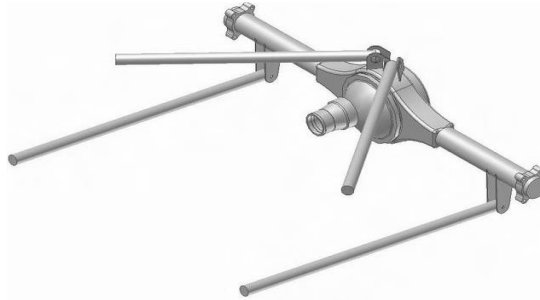
- a. Battery size, type and location are free.
- b. The rest of the system is free provided it complies with the safety standards. Refer Art 8 of the 2023 National SSR's for Rally-Raid.

2.5 Suspension

- a. The original suspension pick up positions must be retained. Use of the original pick up brackets on the chassis is preferred, with additional reinforcing.
- b. Spring rates, torsion bar diameters as well as the free camber height of leaf springs are free.
- c. Shock absorbers as well as their mounting / location are free.
- d. Bump stops are free including the use of hydraulic bump stops.
- e. Suspension bush materials are free.
- f. Dual or any form of additional suspension medium is not permitted.
- g. Suspension travel maximum for front suspension 250mm. Suspension travel maximum for rear Suspension 300mm. Method of measurement. Refer Art 2.6 of the 2023 National SSR's for Rally-Raid.
- h. Anti-tramp rods may be added but these are restricted to one per side. Refer Art 2.8. of the 2023 National SSR's for Rally-Raid
- i. Leaf springs may be replaced with coil springs. As per the layout below.

j. Rear Suspension

- All Class D vehicles may be converted to a live rear axle system, regardless of the original arrangement fitted to the vehicle selected. Independent rear suspension will not be allowed. Live rear axles must be modified to a 4 link system with coil springs and telescopic dampers. The upper arms of the system shall be A-arm type only. The upper A-arm and lower arms are of free design, but ferrous materials only may be used. The only area that this suspension system may occupy is 1.2 metre ahead of the new rear axle centre line and 250mm behind the new axle centre line and one metre above the ground at the specified ride height of 300mm.



k. Front suspension

- Ball joints are free but must come from a production vehicle.
- Top wishbone is free but design must be commission approved for each, make and model.
- Bottom wishbone must be standard, but may be reinforced.
- Standard uprights must be retained, but may be reinforced.
- Steering rack or steering box must be standard or Toyota Land Cruiser or production based, commission approved unit.
- All steering links and joints are free.

2.6 Rims/Tyres

Rims are free provided they do not protrude past the width of the standard body. At least one third of the plan view of the tyre must be covered by the wheel arch bodywork when viewed from above.

Tyres are free.

2.7 Chassis

- a. Standard production chassis of the same model as body and engine.
- b. Chassis may be reinforced provided the original silhouette is retained.
- c. Mounting points for roll cage, fuel tanks and other items may be added.
- d. The chassis rail, in excess of 600mm, ahead of the centre line of the front wheel, may be removed. The rear part of the chassis may be removed from a point, no further forward, than 250mm in front of the centre of the rear axle for the coil sprung live axle conversion only. The chassis rail width shall remain as standard.
- e. Unused mounting points for original items such as shock absorbers, exhaust, load body, fuel tank and spare wheel may be removed.
- f. One rear cross member may be removed or relocated to accommodate the fuel tank or spare wheels.

2.8 Body

- a. This class is for bakkies and SUV's only.
- b. The body must be from the same model range as the chassis. The standard body profile side view, from the front of the grille, bonnet and fenders to the rear of the cab must be retained. The same applies to the plan view, front view and rear view. The front bumper may be replaced by a fiberglass replica, modified below the height of the top of the wheel, Refer Drawing 1. The replica front bumper must blend in with fenders, lights and grille to maintain the production vehicle appearance. The body must be maintained in its original position on the chassis from all points of view, i.e. height, longitudinal and lateral position.
- c. All interior trim and door panels may be removed.
- d. The production dashboard may be retained or remade in a similar shape and size in an alternative material which is non-metallic. All other trim should be removed. Refer Art 13.1.9.i) and ii) of the 2023 National SSR's for Rally-Raid
- e. Seats shall be replaced with FIA approved types. Seat mountings shall be FIA approved or comply with FIA requirements. Refer Art 9 and 10 of the 2023 National SSR's for Rally-Raid.
- f. Rear seats may be removed.
- g. Windows. Refer Art 13.1.23 of the 2023 National SSR's for Rally-Raid.
- h. Bonnet and fenders may be replaced with fiberglass replicas, provided the original shape and profile are retained.
- i. The load body of a bakkie may be removed, provided the side panels or fiberglass replicas of the panels are retained. The load body panels may be modified inside view to suit the wheelbase and exit angle. Refer Drawing 1 for specifications.
- j. Vents or scoops may be added to the roof for ventilation. Where additional vents and scoops are required for functional reasons to aid cooling, these additions are subject to the specific approval of the commission through the Technical Delegate, in writing.
- k. The standard fenders may not be flared. Commercially available over-fenders may be fitted.
- l. A bakkie rear cab window may be replaced with polycarbonate type material, minimum 3 mm thick.

2.9 Fuel System

- a. Fuel tank, capacity and location are free. Fuel tank construction as well as the mounting thereof shall be approved by the MSA Technical Delegate. Refer Art 7 of the 2023 National SSR's for Rally-Raid.
- b. Fuel filters, pumps and pipes are free.

2.10 Crew

Two crew members.

- a. Minimum Weight and Inlet Air Restrictors Minimum weight for petrol powered vehicles 1750kg Minimum weight for Diesel powered vehicles 1800kg Inlet air restrictor
 - Petrol engines - 35mm
 - Turbo diesels - 37mm

3. CLASS E - PRODUCTION BASED VEHICLES WITH CHASSIS, 3.0 LITRE

NOTE:

Competitors contemplating the purchase or construction of a new vehicle for class E must ensure that the specifications and design is acceptable to the Commission and acceptance has been confirmed in writing and signed by both the Commission President and the Technical Delegate. Refer Art 1.4 and 1.5 of the 2023 National SSR's for Rally-Raid.

3.1 Engine

- a. Four (4) Cylinder naturally aspirated petrol or turbo charged diesel. Maximum actual engine capacity not to exceed 3000cc, petrol or diesel.
- b. The engine must be from the same model range as the body and chassis.
- c. All vehicles completed after 1 December 2010, must be fitted with Group N specification engines.
- d. The original turbo unit must be retained.
- e. All vehicles selected to run in this class that are fitted with fuel injection as standard, must retain the standard system. The system includes the inlet manifold and standard throttle body. The air valve may be enlarged provided it is still housed within the standard throttle body. Internal porting and metal removal only is allowed.
- f. Intake manifold for carburetors are free.
- g. Exhaust manifold and exhaust systems are free.
- h. Flywheel to be original, or made of ferrous material only, otherwise free.
- i. Engine mountings are free provided the engine retains its original position in all directions. The attachment of the mounts to the engine block must be to the standard position.
- j. Water radiator is free but must retain its original position in all directions.
- k. Air cleaner system and position is free.
- l. Air conditioners and heaters may be removed.
- m. Piggyback, remapped and direct replacement ECU's are permitted. The engine wiring harness, Connectors and sensors are free. The air mass sensor is free. No telemetry is permitted. No traction control systems or devices are permitted. Refer Art 13.1.10 and 14 of the 2023 National SSR's for Rally-Raid.

3.2 Transmission/Drive Line

- a. Drive 2x4 or 4x4.
- b. Clutch and pressure plates are free, but are restricted to a maximum of twin plates. Carbon friction plates are not allowed.
- c. Gearbox may be replaced with any unit from the model range of the vehicle.
- d. Transfer case mountings are free, as are the internals.
- e. Front diff output shafts are free. Ferrous materials only.
- f. Front drive shafts are free. Ferrous materials only.
- g. Axle housings from the same model range as the vehicle may be used including rear housings being used in front and front axle housings being used at rear. Axle housings may be reinforced.
- h. Internal axle components are free. Ferrous materials only.
- i. Prop shafts and centre bearings are free. Ferrous materials only.

3.3 Brake System

- a. Standard braking system to be retained in its entirety, with the exception of the items listed below.
- b. Friction material is free.
- c. Hand brake system is free.
- d. Brake bias valve may be added to the standard system.
- e. Brake tubing / hoses and location free provided the quality is better or equivalent to the original.

3.4 Electrical System

- a. Battery size, type and location are free. The rest of the system is free provided it complies with the safety standards. Refer Art 8 of the 2023 National SSR's for Rally-Raid.

3.5 Suspension

- a. The original suspension mounting points must be retained, but may be reinforced.
- b. Spring rates, torsion bar diameters as well as the free camber height of leaf springs are free.
- c. Original suspension components may be reinforced only and may not be changed.
- d. Shock absorbers and their mounting points of shock absorbers are free.
- e. Bump stops are free, including the use of hydraulic bump stops.
- f. Suspension bush materials are free.
- g. Duel or any form of additional suspension medium is not permitted.
- h. Suspension travel maximum for front suspension 250mm. Suspension travel maximum for rear suspension 300mm. Method of measurement Refer Art 2.6 of the 2023 National SSR's for Rally-Raid.
- i. Anti-tramp rods may be added. Refer Art 2.8 of the 2023 National SSR's for Rally-Raid.
- j. Leaf spring suspension at the rear must be retained.

3.6 Rims/Tyres

- a. Rims are free provided they do not protrude past the width of the standard body. At least one third of the plan view of the type must be covered by the wheel arch bodywork when viewed from above. Tyres are free.

3.7 Steering

- a. Power steering is permitted.
- b. A steering box or steering rack fitted as standard may be replaced with a Toyota Hilux or Land Cruiser unit.
- c. All steering links and joints are free.

3.8 Chassis

- a. Standard production chassis of the same model range as the body and engine.
- b. Chassis may be reinforced provided the original silhouette is retained.
- c. Mounting points for roll cage, fuel tanks and other items may be added.
- d. Bush bars, rear bumper and protective/skid plates may be added.
- e. No part of the original chassis rail may be removed.
- f. For monocoque construction vehicles the total monocoque must be retained and only reinforcing is permitted.
- g. Unused mounting points for original items such as shock absorbers, exhaust, load body, fuel tank and spare wheel may be removed.
- h. One rear cross member may be removed or relocated to accommodate the fuel tank or spare wheels.

3.9 Body

- a. The body must be from the same make and model range as the chassis. The standard body profile side view from the front of the grille, bonnet and fenders to the rear of the cab must be retained. The same applies to the plan view, front view and rear view. The front bumper may be replaced by a fiberglass replica, modified below the height of the top of the wheel. Refer Drawing 1. The replica front bumper must blend in with fenders, lights and grille to maintain the production vehicle appearance. The body must be retained in its original position on the chassis from all points of view, i.e. height, longitudinal and lateral position.
- b. All interior trim and door panels may be removed.
- c. The production dashboard may be retained or remade in a similar shape and size in an alternative material which is non-metallic. All other trim should be removed. Refer Art 13.1.9.i) and ii) of the 2023 National SSR's for Rally-Raid.
- d. Crew seats shall be replaced with FIA approved types. Seat mountings shall be FIA approved or comply With the FIA requirements. Refer Art 9 and 10 of the 2023 National SSR's for Rally-Raid.
- e. Rear seats may be removed.
- f. Windows. Refer Art 13.1.23 of the 2023 National SSR's for Rally-Raid.
- g. Bonnet and fenders may be replaced with fiberglass replicas, provided the original shape and profile are retained.
- h. The load body of a bakkie may be removed, provided the side panels or fiberglass replicas of the panels are retained.
- i. The load body panels may be modified in side view to suit the wheelbase and exit angle. Refer Drawing 1 for specifications.
- j. A station wagon rear and side windows may be removed or replaced with fiberglass or aluminium panels.
- k. The floor or the rear body section of a station wagon may be removed, provided there is a firewall between the occupants and the fuel tanks.
- l. Vents of scoops may be added to the roof for ventilation.
- m. The fenders may not be flared.
- n. A station wagon rear doors may be removed.
- o. A bakkie rear cab window may be replaced with polycarbonate type material.

3.10 Fuel System

- a. Fuel tank, capacity and location are free. Fuel tank construction as well as the mounting thereof shall be approved by the MSA Technical Delegate. Refer Art 7 of the 2023 National SSR's for Rally-Raid.
- b. Fuel filters pumps and pipes are free

3.11 Crew

Two crew members.

3.12 Minimum Weights and Restrictors

- a. Weight - 1700kg
- b. Restrictors
 - Petrol – exempt.
 - Turbo Diesel - 39mm

DRAWING 1

Bodywork

Silhouette formula – Only change to silhouette where specified

