

2021

Technical Regulations

Northern Regions HRSA Historic Production Car Group N Club Championship



Version 1

1 January 2023

Ref: 162876

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. Engine:

- 1.1 **Ignition:** Timing, rev limiters, high tension cables, makes & type of spark plugs are unrestricted. If the ignition timing and rev limiters are controlled by a computer, the may only be modified by means of a different chip and not by any other method other than electrical.
- 1.2 **Cooling System:** The water radiator may be changed however the replacement unit must be mounted in the same position as the original and the number and size of hoses must be identical to the original.
- 1.3 Sump plug and oil filter must be wire locked.
- 1.4 Sump baffles may be fitted to prevent oil surge but the sump may not be increased in size or shape.
- 1.5 Reboring is not permitted.
- 1.6 **Sleeving:** Engine blocks that have been damaged may be resleeved.
- 1.7 **Pistons:** Piston weight may be altered by machining the underside of the piston crown only.
- 1.8 **Compression ratio:** The compression ratio will not exceed that of the standard motor less the stated percentage permissible as listed in Tolerances item 11.
- 1.9 **Valve timing:** Modifications to pulleys, sprockets or gears to alter the valve timing characteristics are not permitted. No boosting control will be permitted from inside the car.

2. Gearboxes:

- 2.1 Gearbox must ideally be the standard gearbox used by the manufacturer alternatively a standard production gearbox from an alternative manufacturer with no more forward gears than the original.
- 2.2 Gear ratios are free.
- 2.3 Limited slip differentials are permitted and modifications may be made within the original casing provided that the original axle casing and type is retained.

3. Suspension:

- 3.1 Castor, camber and toe may be modified.
- 3.2 Different suspension components may not be used.
- 3.3 Welding of / or alteration to the standard suspension components is prohibited.
- 3.4 Shock absorbers may be replaced provided that the original mounting points and method of mounting is not changed. In case of strut type suspension replacement, units must be mechanically identical to the original.
- 3.5 Any spring diameter and number of coils may be used but the original height of the standard car must be retained.
- 3.6 The diameter of the ani roll bar is unrestricted.
- 3.7 No bodywork modifications involving cutting and or welding is permitted.
- 3.8 Exterior body trim and bumpers shall remain as originally fitted.
- 3.9 Headlights, taillights, stoplights and indicators (front and back) must be in full working condition.

4. Reinforcement:

A reinforcement brace may be fitted between the front top suspension mounting points.

5. Wheels & tyres

- 5.1 Only DOT rated tyres will be permitted and semi-slick tyres will be permitted provided that they contain a grooved pattern throughout.
- 5.2 The rim size will be the standard manufactured rim size.
- 5.3 Any wheel width is permitted provided that its fits within the standard non-modified bodywork confinement.
- 5.4 Cut slick tyres are prohibited.
- 5.5 Wheel studs or wheel bots are fee but wheel studs must be of the open-ended type.

5.6 The upper part of the wheel (rim and tyre) located vertically over the wheel hub centre must be covered by the standard bodywork. The measurements shall be made in a vertical plane.

6. Brakes

- 6.1 Brakes are free provided they fit in the original rim size as was fitted as OEM standard.
- 6.2 Brake dust covers may be removed.
- 6.3 Brake cooling duck may be fitted provided they entail no modifications to the bodywork.
- 6.4 Carbon fibre brakes are specifically not permitted.

7. Exhaust

- 7.1 Exhaust manifold must remain standard.
- 7.2 The exhaust pipe from the manifold collector may be modified but must be gas tight throughout its entire length.
- 7.3 All cars must however, comply with noise level regulations as per GCR 245.

8. Interior

- 8.1 Fire hazard material (i.e. carpets, floor sound deadening material, seats, roof linings, rear parcel shelf and boot mat) may be removed and the loss of weight made up by ballast weight.
- 8.2 Spare wheel and tools must be removed.
- 8.3 Additional instrumentation may be fitted but they must not be fitted in place of the original instruments, which may not be changed.
- 8.4 Seat mounting brackets may be altered.
- 8.5 The driver's seat may be replaced with a racing type seat.
- 8.6 Windscreens must be of laminated glass.
- 8.7 The fitting of an Appendix J compliant roll cage is permitted.

9. Exterior

Hub caps and wheel trims must be removed. Headlamps must be crossed with adhesive tape.

10. Weight

The minimum weight of the car will be determined by the stated weight in the auto digest data book less 1%. Should the weight be less than permissible, ballast weights will be added by means of welding or bolting to the boot, passenger or engine component.

11. Tolerance

The following tolerances are permitted:

1. Compression ratio Normally aspirated, may not exceed + 2%

Turbo - 2% + 4%

2. Vehicle weight - - 1%

3. Ride height +/- 25mm

12. Classes

Class times will be determined as per pre 90 saloon car times.