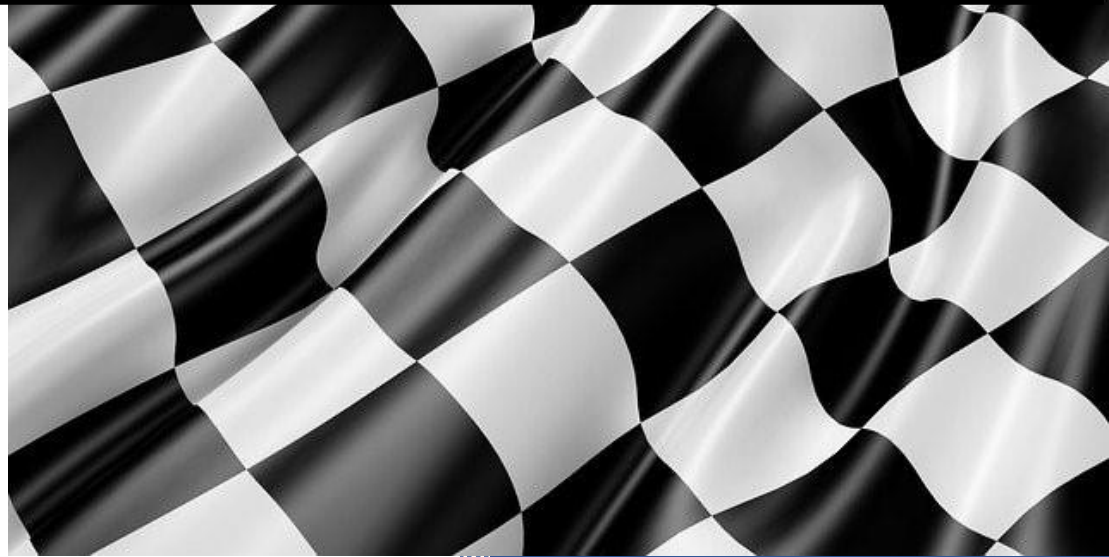




2022

## Technical Regulations

# National PRE-1990 Historic Touring Car Championship



Version 1

1 January 2022

Ref: 162658

## 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

| <i>Modified SSR / Art</i> | <i>Date Applicable</i> | <i>Date of Publication</i> | <i>Clarifications</i> |
|---------------------------|------------------------|----------------------------|-----------------------|
|                           |                        |                            |                       |

### CONTROL:

These regulations were compiled by the WPMC Historic category in consultation with Historic Racing South Africa, Midvaal Historic Car Club, Retro Racing South Africa, Border Motorsport Club, Algoa Motorsport Club and Historic Motoring Commission (HMC). for final publication by Motorsport South Africa (MSA) and for use by all the above mentioned clubs. The HMC hereby reserves the right to monitor and if so necessary, amend any such historic regulation in the best national historic interests of the category through consultation with all historic clubs.

### Historic Touring cars Pre-1990

These Historic Cars shall be defined as production type cars raced, registered and produced post 1 January 1980 but prior to 31 December 1989. These cars and any derivative thereof must be out of production for at least 20 years after this cut-off date pre-1990.

Cars must have an MSA stamped and registered Historic Technical Passport available for inspection at all events. Any aspect of a car not detailed as permitted is deemed not to be permitted. (Refer GCR 226)

### CATEGORY SPECIFICATIONS:

#### ELIGIBILITY

1. Historic Cars Pre-1990 Series is open to cars that fit the general category Historic Cars (2-door and 4-door).
2. Historic Touring Cars Pre-1990 are production cars launched before 31st December 1989.
3. Vehicles may be brought up to any series production specifications for that model prior to 31st December 1989.

4. Only period (pre 31 December 1989) type modifications will be permitted unless otherwise stated. Any modifications must be proven to be in this period as stated. Where applicable, mechanical parts may not be replaced with electronic parts.
5. Production cars fitted with OEM forced induction will be limited to a maximum of 1 turbo charger. Competitors registering in this Championship do so in the full knowledge and acceptance of these regulations. Refer to SSR 2.
6. The responsibility to prove eligibility is that of the entrant at all times.
7. The Controllers reserve the right at their sole discretion to include or exclude any vehicle.

## **TECHNICAL SPECIFICATIONS:**

### **1. CHASSIS:**

- 1.1. Chassis and chassis members must remain as originally manufactured fixed static portion should remain as per manufacturer as it is a safety critical item and lightening or reducing of chassis is prohibited.
- 1.2. Addition of material to strengthen the chassis and seam welding is permitted.
- 1.3. Steering wheels and steering columns are free.
- 1.4. Foot controls and their linkages are free except that the foot-operated surface of the brake pedal must be located no more than 100 mm forward or rearward of the original production position.

### **2. BODYWORK:**

- 2.1. Bodywork must be complete and standard in shape and silhouette, material and thickness on all exterior surfaces. Plan and profile to remain. Where original materials are unobtainable, local repairs of adequate strength may be made using non-original material but will be limited to the use of glass fibre only. The removal of exterior decorative strips and bumpers is permitted. Panels of a glass fibre material, if approved on application to the controllers, may be used to replace metal panels, however the panel must be panel for panel from all angles the same as the original. Panels manufactured from other composite material are specifically excluded.
- 2.2. Reworking or modification to exterior bodywork is prohibited. The wheel arch fender pressing may be flared to a maximum of 50mm on each side.
- 2.3. Strengthening is permitted.
- 2.4. Interior: These regulations require the retention of the complete dashboard, all interior door and rear quarter trim. Door panels may be replaced by aluminium. In the cabin, floor carpets, under felt, sound deadening, headlining, front and rear

parcel shelves, centre consoles, the front passenger and rear seats and trim in the boot/luggage compartment may be removed.

- a) Instrumentation is free although the original complete dashboard must remain.
  - b) Windscreens and side windows may be replaced with polycarbonate lexan providing the front windscreen is not less than 5mm thick.
  - c) Drivers seat is free subject to MSA requirements and the driver must be located entirely to the one side of the centre line of the car.
  - d) Heaters and interior ventilation systems may be removed.
- 2.5. The original boot and bonnet fasteners may be removed. The bonnet and boot shut lines must be as in production.
- 2.6. "Front Vallance" and additional louvers are allowed for radiator or heat exchanger cooling as per period and per racing evidence and as per picture evidence.
- 2.7. NECA - duck air ventilation is allowed if raced in the period on the bonnet.
- 2.8. Bumpers and embellishers may be removed, but headlamps and headlamp rims, tail lamps and radiator grilles must remain as standard for the model.
- 2.9. Front engine cars may raise the rear section of the bonnet to a maximum of 25mm above the shut line to aid cooling.

### **3. ENGINE:**

- 3.1. The engine must be located in the original position. Cars fitted with ECU in the period, which are now longer serviceable, may fit an alternative ECU. ECU that can be manipulated from inside the Cockpit is prohibited. Only Period correct functionality and configuration will be allowed and must be indicated on the HTP documentation.
- 3.2. The original standard production cylinder block for the model must be used. It must be a period correct manufactured block.
- 3.3. Although they may be modified, the cylinder head(s) must be the standard production component or a replacement alternative manufactured by the same manufacturer as the original production component of that era. The number of valves as well as the number of spark plugs must remain the same as the original replaced head for the model / type.
- 3.4. The crankshaft is free.
- 3.5. Camshafts, camshaft bearings and drive systems are free, provided that they remain in their original positions and remain the sole means of operating the valves.

- 3.6. Cars in the era that were produced with electronic fuel injection will be permitted to run the electronic fuel injection with the standard manifold or aftermarket throttle bodies if raced like that in the period.
- 3.7. Carburetors are free.
- 3.8. Radiators are free but must remain in their original location.
- 3.9. Oil coolers and additional water radiators are permitted provided they are located within the periphery of the bodywork.
- 3.10. The exhaust system is free provided it is not routed within the cockpit area and is also subject to MSA requirements as regards decibel levels.
- 3.11. The distributor may be fitted with an after-market spark triggering device, but the distributor must remain in its original position and must maintain its original function. Any additional system which processes information acquired from the ambient conditions and / or the engine is not permitted. The distributor must be the only means of determining ignition advance and retard and must continue to distribute the high-tension spark. The firing order must not be changed. The remainder of the ignition system is free.
- 3.12. Forced induction is not permitted unless either fitted in production or homologated. Boost pressure may not be adjustable from within the cabin. Only period components may be used. Boost Pressure is limited to a maximum of 100 kPa or 1 Bar above atmospheric pressure or as per manufacture.
- 3.13. Turbo and diameter to remain as per OEM in the period.
- 3.14. Inlet and exhaust manifolds are free.
- 3.15. It is permissible to remove metal from original cylinder blocks and heads.
- 3.16. Fuel pumps and fuel tanks are free subject to MSA requirements.
- 3.17. All other engine components are free. Engine capacity may be increased within the confines of the manufacturers original production engine block.
- 3.18. Water coolant to be circulated via a pulley driven pump.

#### **4. SUSPENSION:**

- 4.1. Front suspension: Suspensions may be modified providing the original type and one of the manufactures' original mounting points per wheel on the body is retained. Remote reservoir shocks are not permitted.
- 4.2. Rear suspension: Suspensions may be modified providing the original type and at least one of the manufacture's original mounting points per wheel are retained.

- 4.3. Additional mounting points for the adding of roll bars, radius arms, tramp rods and lateral control rods (Panhard Rod & Watts linkage) may be fitted.
- 4.4. Shock absorber make and type are free and coil over units are permitted. Remote reservoir shocks are not permitted.
- 4.5. Spring rates are free but the original type of spring must be retained made of the original material and remain effective. Original spring type may be supplemented by the use of coil over type shock absorbers.
- 4.6. Suspension bushes are free.
- 4.7. Wheel base datum points must remain within 25mm of the standard specification

**5. TRANSMISSION:**

- 5.1. The gearbox must remain in the original position. Vehicles must use an original production type of gearbox with the same number of forward and reverse gears as the original standard production gearbox fitted for that model.
- 5.2. Gear ratios and type are free but gearboxes and transaxles with rapidly interchangeable ratios or proprietary racing gearboxes are prohibited.
- 5.3. The rear axle must remain in the original position.
- 5.4. The rear axle casing is free.
- 5.5. The final drive ratio is free.
- 5.6. Mechanical limited slip or torque biasing differentials are permitted.
- 5.7. Sequential gearboxes and/or traction control devices are prohibited.

**6. BRAKES:**

- 6.1. Brake system modifications are free save that carbon type brake rotors and ABS systems are prohibited.
- 6.2. ABS will only be permitted on vehicles that came with this feature as standard by the manufacturer at the time.
- 6.3. Brake lights must be operational and operated only by the brake pedal without a delay or another switching device

**7. ELECTRICAL:**

- 7.1. Electrical equipment is free provided that a battery and starter are always fitted and in full working order.
- 7.2. Headlights, tail lights, indicators and stop lights must fitted, brake light must be working as required. Where standard headlights and additional LED type spotlights are used in a race, they must be angled to not interfere with view of the drivers in the cars in front.

7.3. No LED type strip lighting is allowed. LED lights may be used within the original light fitting.

**8. WHEELS AND TYRES:**

8.1. Wheels must fit inside the bodywork as per Section 3.

8.2. Any period style wheel rim that has a diameter within one inch either side of what was fitted as original equipment may be used.

8.3. Tyres: DOT approved semi slicks or locally manufactured production car tyres are allowed. Full Slicks and Cut-slicks are prohibited.

**9. GENERAL SPECIFICATIONS:**

9.1. Minimum weight for cars which conform to the current regulations may not be less than 10% below the manufacturer's stated kerb weight for the model raced. The weight of all cars must be recorded in the HTP document.

9.2. Cars must be fitted with a roll cage in compliance with MSA GCR 239 requirements. The roll cage must remain within front and rear suspension mounts.

9.3. Cars must be fitted with seatbelts that comply with MSA GCR 239 specifications. There must be a minimum of 4 separate mounting points excluding the use of any additional crotch belt and shoulder belts must not cross over.

9.4. Cars must carry a 1.5 kg fire extinguisher as approved for use by MSA this can be supplemented by a Fire Stryker.

9.5. Cars must have an electrical cut-off switch that can be operated from inside and outside the vehicle.

9.6. Tow eyes must be fitted to the front and rear of the car and clearly marked. (Tow) (Refer SSR 10 iii)

9.7. Fuel must conform to the specifications as described in GCR240.

9.8. Cars must comply with General Competition Rules and Regulations (GCR's) as specified in the MSA Handbook 2022.

9.9. Vehicles may not exceed 108 decibels at any time, for clarity, this includes the stationary measurement as well as the drive by recording.

**BODYWORK GUIDELINE:**

The following guideline will be applicable at nationally in order to determine the correct bodywork rule application regarding the flaring of the standard production fender pressing. The measurement will be taken from the vertical centreline of the wheel hub to the widest part of the standard production fender flare without any attached trimming fitted. 50mm may be added to the standard production fender pressing from such widest point.

