

## **TECHNICAL REGULATIONS 2017**

### **WPMC PRE-77 HISTORIC SALOON CARS**

#### **CONTROL**

These regulations are drafted in consultation with the Historic Motorsport Commission (HMC), Historic Racing South Africa (HRSA) and WPMC Classic Car Racing administrators for final publication by Motorsport South Africa (MSA).

#### **1. ELIGIBILITY**

1. Historic Saloon Cars are production saloon cars marketed before 31st December 1976 and out of current production for at least ten years.
2. Cars must have an MSA stamped and registered Historic Technical Passport which must be available for inspection at all events.
3. The responsibility to prove eligibility is that of the entrant at all times.
4. Replica vehicles, subject to the MSA approved rules as indicated on Appendix 1.

#### **TECHNICAL SPECIFICATIONS**

#### **2. BODYWORK**

- 2.1 The exterior bodywork must remain in plan and profile, from all angles, exactly as produced by the vehicle manufacturer for the model in the period. No holes may be cut into front and rear valances and valances may not be removed. No additional spoilers, air ducts, scoops or blisters are permitted on the bodywork. Replacement of original wheel arch interiors or transmission tunnels with box structures is not permitted.
- 2.2 The wheel arch fender pressing may be flared or a period type Group 2 wheel spat may be fitted providing that the width of the wheel arch is not increased by more than two inches. The wheel arch extension must cover the upper third of the wheel when viewed from above. For Group 5 cars the period homologated wheel arch width is permitted.
- 2.3 Where aftermarket body panels and aerodynamic panels are to be used, a picture of the original car and the intended modification needs to be submitted to the controllers of the series before the intended modification is done. The controllers reserve the right to disallow the intended modification at their sole discretion should it not be deemed to be of the correct period.
- 2.4 Panels of a glass fibre and carbon 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.

- 2.5 Bumpers and embellishers may be removed, but headlamps and rims, tail lamps and radiator grilles must remain as standard for the model.
- 2.6 It is recommended that headlights, tail lights and indicators should be in full working order.
- 2.7 Cars must be fitted with at least one internal mounted and one externally mounted rear view mirror.
- 2.8 Rear engine cars with front mounted radiators may modify the front lower valance to accommodate the radiator.
- 2.9 All rear engine cars may have raised bonnets to aid engine cooling.

### **3. INTERIOR AND GLASSWORK**

- 3.1 Windscreens and side windows may be replaced with polycarbonate (Lexan) providing the front windscreen is not less than 5mm thick.
- 3.2 Original dashboards or similar must be retained but instrumentation is free. Door panels must remain however original material may be replaced with aluminium.
- 3.4 Carpets, under felt, sound deadening material, headlining, interior trim, front and rear parcel shelves, centre consoles, heaters, interior ventilation systems, front and rear passenger seats and boot compartment trim may be removed.
- 3.5 Drivers seat is free subject to MSA requirements and the driver must be located entirely to one side of the centre line of the car.

### **4 SUSPENSION**

- 4.1 Suspensions may be modified providing the original type and one of the manufactures original mounting points per wheel on the body is retained.
- 4.2 Additional mounting points for the adding of roll bars, radius arms, tramp rods and panhard bar may be fitted.
- 4.3 Shock absorber make and type are free and coil over units are permitted.
- 4.4 Spring rates are free but the original type of spring must be retained. Original spring type may be supplemented by the use of coil over type shock absorbers.
- 4.5 Steering boxes may be replaced with a steering rack.
- 4.6 Wheel base datum points must remain within 25mm of the standard specification.

## **5. BRAKES**

- 5.1 Brake system modifications are free save that carbon type brake rotors and ABS systems are prohibited.
- 5.2 Brake lights must be operational and operated only by the brake pedal without a delay or other switching device.

## **6. WHEELS & TYRES**

- 6.1 Wheels comprise the rim and tyre assembly and must fit within the bodywork as described in Regulation 2.2 Bodywork.
- 6.2 Any period style wheel rim that has a diameter within one inch either way of what was fitted as original equipment by the manufacturer or where approved by the administering body a 15 inch wheel rim may be used.
- 6.3 Rim and tyre widths are free but must fit within the confines of the bodywork as described in Regulation 2.2 Bodywork.
- 6.4 Tyres are free of restriction.

Note: Refer to the 2014 committee ruling on 16" rims as per MSA directive dd 21/05/2014.

## **7. ENGINES**

- 7.1 Any period pre-77 engine block may be used as manufactured in the period by the original vehicle manufacturer with the same number of cylinders as originally fitted to the model of car concerned.

### **7.2.1 HRSA Regulation:**

Engine blocks manufactured by the original manufacturer post-76 may only be used if they are a direct replacement for the original block of the period.

### **7.2.2 WPMCCR Regulation:**

Engine blocks manufactured by the original manufacturer post-76 may only be used if they are the same as the original block of the period. Block casting numbers will be used to determine eligibility.

- 7.3 Cylinder heads may be substituted for another type manufactured by the same manufacturer providing the camshaft position, number of camshafts, number of valves and spark plugs remains the same as the original of the period

- 7.3.1 Aftermarket aluminium heads are permitted for the V8's.

- 7.4 Rotary engines: The number of rotors must remain as per the production engine of the period. Side port and peripheral port rotor housings are eligible.

- 7.5 Oil system: Dry sump systems are permitted.

- 7.6 Ignition: Electronic systems are permitted providing that the distributor and its function are retained. No programmable electronic ignition system may be used.
- 7.7 Intake and exhaust manifolds are free.
- 7.8 Induction system: Period type carburettors and fuel injection systems only.
- 7.9 Fuel Pump: Any fuel pump/s may be used.
- 7.10 The engine must be mounted in the original position.
- 7.11 All other engine modifications are free of restriction.

## **8. TRANSMISSION**

- 8.1 The gearbox or transaxle must be the original make and type or any non sequential gearbox with a maximum of five forward speeds.
- 8.2 Gearboxes and transaxle units must be mounted in the original position.
- 8.3 Rear axle casings are free but the original type may not be substituted for another and must remain in the original position.
- 8.4 Sequential type gearboxes and traction control devices are prohibited.
- 8.5 The clutch and the method of operation are unrestricted.
- 8.6 Gear ratios and final drive ratios are free and any type of limited slip or locked differential unit may be used.

## **9. GENERAL TECHNICAL SPECIFICATIONS**

- 9.1 Minimum weight for original and exact replica cars may not be less than the homologated weight or 10% below the manufacturers stated kerb mass for the model.
- 9.2 Cars must be fitted with a roll cage in compliance with MSA GCR 239 requirements.
- 9.3 Cars must be fitted with seatbelts that comply with MSA GCR 239 specifications.
- 9.4 Cars must carry a fire extinguisher (minimum 1.5kg) or alternatively an MSA approved Fire Stryker which must be accessible to the driver when strapped into the driver's seat.
- 9.5 Cars must have an electrical cut-off switch that can be operated from inside and outside the vehicle.
- 9.6 Tow hooks must be fitted to the front and rear of the car and clearly marked. (Tow)
- 9.7 The exhaust system is free subject to MSA GCR 245 Silencing of Vehicles.
- 9.8 Fuel must conform to the specifications as described in GCR240.

9.9 With the exception of devices contemplated in 17.3 of the non-technical rules, in-car timing devices other than the official transponder type are not permitted.

9.10 Cars must comply with General Competition Rules and Regulations (GCR's) as specified in the MSA Handbook 2014.

# **APENDIX 1**

## Regulations for pre-1977 Replica Vehicles

### **1. Criteria**

A replica of an International or National recognised car will only be allowed. This should be at the discretion of the relevant administering committees. Potential car builders are advised to contact their local administrator (HRSA or WPMC) prior to build commencement.

HRSA and WPMC will consult on any proposed cars prior to permission being granted or not.

### **2. Technical Regulations**

The car must be identical in all respects to the original car. It is the responsibility of the entrant to provide the relevant documentation to the administering body to establish these parameters. In the case of FIA homologated cars, the relevant homologation papers should be provided for the reference. The following regulations should be read in conjunction with the 2014 National Technical Regulation for Pre-77 Historic Saloon Cars which will apply unless specifically stipulated as not applicable.

#### **A. Bodywork**

This should be identical in dimension to the car being replicated. Regulation 2.1 is to be respected where this does not conflict with the presented specification of the car being replicated.

#### **B. Suspension**

This should be identical to the car being replicated. Regulation 4.2 may be applied.

#### **C. Engine configuration**

This must be the same engine unit as originally fitted to the car. Regulation 7.3 may not be applied. The use of carburettors in place of period mechanical fuel injection will be allowed. The power output of the engine should not exceed that of the original car and will need to be documented by the competitor for both the original and current engines. Capacity is free but the power output restriction must be respected.

#### **D. Transmission**

Regulation 8, 8.1 to 8.6 will apply.

#### **E. Wheel size and rim width**

The wheel size must be that of the original car and regulation 6.2 may be applied. Rim width must not exceed that of the original car. The tyre and rim must fit within the confines of the bodywork as fitted.

#### **F. Steering wheel position (LHD/RHD)**

The steering wheel position may be either left of right hand drive but must be fitted in either form to the original position on the car.

#### **G. Weight**

The car may not weigh less than the original stipulated weight or in the case of FIA cars, the FIA homologated weight. This is taken as the car with water and oil but without fuel.

### **APPENDIX E**

#### **National Technical Regulations 2014 Pre-72 Historic Saloon Cars**

Appendix E has been deleted in its entirety.

#### **Suggest Engine Blocks for Pre-77 (guideline only)**

Refer to you local committee for the clarity if required.

2.3.1 Cylinder blocks with the same number of cylinders may be substituted for a similar type from the same manufacturer produced in the period as detailed below: -

2.3.2 Alfa: the block used for the 1300, 1600, 1750 and 2000 may be used.

2.3.3 Mini: any A series block may be used. The metro block may not be used.

- 2.3.4 Opel Manta: 1.6, 1.9 2.5 - 4cylinder, 2.8 - 6 cylinder and 1.9 turbo engines may be used.
- 2.3.5 Datsun/Nissan: the A12 and A14 blocks may be used in the A series cars. The L18 and L20 blocks may be used in the larger cars.
- 2.3.6 Fiat: the 1600, 1800 and 2000 - 8 valve twin cam motor may be used in front engine cars.
- 2.3.7 Ford Anglia: any Kent block may be used.
- 2.3.8 Ford Corsair: any Kent block may be used.
- 2.3.9 Ford Cortina: any Kent block may be used.
- 2.3.10 Ford Capri: any Kent V4, V6, V8, Ford block from the period may be used.
- 2.3.11 Ford Escort Mark 1 two door body: any Kent, Pinto, BDA or BDG block may be used.
- 2.3.12 Ford Escort Mark 1 four door body: any Kent block may be used.
- 2.3.13 Ford Escort Mark 2 two door body: any Kent, Pinto, BDA or BDG block may be used.
- 2.3.14 Ford Escort Mark 2 four door body: any Kent block may be used.
- 2.3.15 Jaguar: Any 6 or 12 cylinder engine from period may be used.
- 2.3.16 Mazda: the 10A, 12A, 13A, and 13B double rotor engines may be used.
- 2.3.17 Renault: R8, R9, and R16
- 2.3.18 Volvo: the B16, B18 and B20 blocks may be used.
- 2.3.19 Volkswagen Beetle: all type 1, 2, 3 and 4 air-cooled blocks may be used.
- 2.3.20 Volkswagen Scirocco: only type 1 Golf block with single drain hole may be used. H blocks not allowed.