

Manual Amendment

These amendments have been authorised to the text of MotorSport Manual Edition 35. It is recommended that in addition to retaining a copy of this amendment that all parties modify the actual text in their Manual according to the following:

Appendix Six, Schedule RH – Technical Regulations for Historic Rally Cars

Amendments to Schedule RH in Manual 35:

1. Amend Entire Schedule as stated the schedule below.

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1. Item One:

Technical Regulations for Historic Rally Cars

Preamble: Schedule RH is the technical specification schedule for NZ Historic or Classic Rally cars.

The purpose of this category of rallying is to emulate, as far as possible, the rallying of vehicles built before 1 January 1987 (“the Period”) which competed in the New Zealand Rally Championship. Vehicles of that period largely comprised of FIA Groups 1 to 4, with the addition of Group Pacific, which allowed non homologated cars such as the Holden XU1 to be built to a similar level of modification as a Group 4 car. The Group B “supercars” contested the latter part of this period. Group B cars were banned from WRC competition after 1986.

The philosophy reflected in these regulations is that cars shall look and perform much as they did in the period, whilst allowing sufficient freedoms as to recognise the current age of the series production vehicle and the inability to source some original components.

1. **General Conditions:** The only allowable modifications to the Series Production Vehicle are those described hereinafter. All vehicles are required to comply with the provisions of Schedule A with respect to rallies.

Proof of all “Period Modifications” must be provided and all parts must have been available in the “Period” or “homologated” in the “Period” and detailed in the appropriate FIA papers or detailed on the MotorSport NZ Certificate of Description.

2. **Definitions:**

“COD” means the Schedule RH Certificate of Description form as appended to this Schedule.

“Electronic” means controlled by an ECU (Electronic Control Unit) utilising data gained from sensors electronically measuring the values of engine input and output functions.

“HTP” means Historic Technical Passport.

“Homologated” means a technical specification including all components, put forward by the manufacturer of an individual vehicle model as approved on a descriptive form issued by the FIA. Refer to FIA Appendix J Article 252-2.1.8.

“Make” means the part(s) produced within that manufacturer’s model range. A change in model is determined by a change in model number/classification instigated by the manufacturer. The use of pattern parts is permitted.

“OE” means Original Equipment parts as supplied and/or fitted by the original vehicle manufacturer.

“Pattern part(s)” means a component manufactured to replicate function and purpose of an Original Equipment part and to fit without modification.

“Period Modification” means any component which was homologated by any manufacturer for any vehicle of the Period and modified as authorised by the regulations of the Period.

“Series Production Vehicle” Means a car that has been manufactured in a certain number of identical units within a specified time frame by the same manufacturer, and intended for general sale to the public through a dealer network.

“Standard” means the component(s) as originally fitted to the car by the original manufacturer at the time of the sale.

“The Period” means prior to 1st January 1987.

“Variant” means an optional or homologated specification as provided by the original manufacturer for the series production vehicle. These are either supply variants (VF) (two suppliers providing the same part for the manufacturer and the client does not the possibility of choice), or production variants (VP) (supplied on request and available from dealers), or option variants (VO) (supplied on specific request).

3. Eligible Vehicles: Vehicles must have a COD, HTP, HVIF or overseas equivalent to be eligible. At all times the onus of proof of eligibility of the vehicle and/or components will be the responsibility of the Entrant.

3.1 The Schedule recognises cars in two(2) categories:

(1) Category One:

- (a)** FIA homologated vehicles fully compliant with FIA Appendix J Articles of the period. Refer to <http://argent.fia.com/web/fia-public.nsf/whistj?open&lang=a>
- (b)** Cars fully compliant with MotorSport NZ Schedule I of the Period. Specifications for rally cars competing in National, International and Pacific Series events.

(2) Category Two: Any vehicle listed as homologated by the FIA prior to 1 January 1987, being either;

- (a)** FIA Groups 1 to 4 compliant (refer Category One) with a COD listing additional modifications compliant with Schedule RH, or
- (b)** Any vehicle compliant with MotorSport NZ Schedule I of the Period (refer Category One) with a COD listing additional modifications compliant with Schedule RH, or
- (c)** FIA Groups A and B compliant (refer Category One) - 2WD only - with a COD listing additional modifications compliant with Schedule RH, or
- (d)** FIA Group B – 4WD Turbo, compliant with genuine FIA homologation papers and MotorSport NZ Schedule K.

MotorSport NZ may at its sole discretion allow variation/s to Schedule RH where it can be established that the original component is no longer available and that the alternative component has the same mechanical function and does not provide any weight or other performance advantage (beyond reliability) over the original.

A list of previously homologated vehicles is available on the FIA website under Sport/Regulations / FIA Historic Rally Championship – www.fia.com/sport/Regulations/histrally.html

4. Permitted Modifications: A vehicle may be modified to utilize the period variations within the manufacturer's model body shell.

4.1 Body Shell External:

- (1) **External appearance:** The silhouette of the Series Production Car shall not be altered with the exception that the addition of Period type rear boot-lid spoilers and guard flares is permitted. These items may be constructed from an alternative material as per the Period.
- (2) **Windscreens:** Laminated screens in place of safety glass are recommended.
- (3) **Suspension tower (strut) brace:** May be installed, provided it remains removable, hence is attached by means of bolts.
- (4) **Seam welding:** Is authorised to the bodyshell.
- (5) **Strengthening:** Localised strengthening of the bodyshell is authorized provided the additional material completely follows the shape of the original part and is in contact with it.
- (6) **Underbody protection plates:** Are authorised, provided that their sole function is to protect the underside of the car from damage. Additionally, to protect the side of the car soft flexible material may be fitted longitudinally between the wheel arches provided it is contained within the bodyshell silhouette when viewed from above.
- (7) **Mudguards:** Guard liners may be removed. The edges of the standard guards may be folded back if they protrude inside the wheel housing. The original external shape, except for guard flares, must be retained.
- (8) **External rear-view mirrors:** May be substituted.
- (9) **Roof vents:** are permitted but they must be in the forward one-third of the roof, so that their open side faces forward, and their vertical opening is not greater than 10cm.
- (10) **Internal Appearance:**
 - (a) Body shell modifications of the Period to enable drive train and exhaust system fitment and to allow the installation of alternative mounting points for Period modifications to the rear suspension and wheel arches are permitted.
 - (b) The interior trim is free, excepting that the original or Period variant dashboard assembly shall be retained in its original position.

4.2 Engine:

- (1) **Engine location:** The engine must be mounted in the original compartment and no body shell modifications to enable relocation are authorised. Engine mountings are free.
- (2) **Cylinder Block and Crankcase:** The original make of cylinder block and crankcase from the manufacturer of the vehicle or the homologated / Period option must be employed. The swept volume of the engine must remain within the same cubic capacity class as the engine supplied by the vehicle manufacturer. Where an engine is close to the capacity limit of the class, and reboring (which is permitted only to a maximum of 1.5mm in this case) causes the engine to pass into the next capacity class, the engine will be deemed to conform to the original class. Modifications to internal components are free. The use of Titanium is forbidden.

- (3) **Cylinder Head:** The original make of cylinder head from the manufacturer of the vehicle or the homologated / Period option must be employed. Modifications are free. The use of Titanium is forbidden.
- (4) **Cooling system:** Free, providing all components are mounted within the bodywork.
- (5) **Inlet and exhaust manifolds:** Free.
- (6) **Induction and fuel systems:** Free, provided that the original or homologated system, i.e. carburettor or fuel injection, is retained.
- (7) **Engine Management:** Computerised electronic fuel injection may only be utilised if originally fitted. In such cases the ECU is free, save that it must respect the original housing and location.
- (8) **Ignition system:** Free.
- (9) **Exhaust system:** Free.
- (10) **Engine Oil Coolers:** May be fitted
- (11) **Camshafts:** Free, provided remains in original location.

4.3 Transmission:

- (1) The transmission housing must be either,
 - (a) The original series production unit, or
 - (b) A recognised replica of the original production unit, or
 - (c) An homologated non OE option from an alternative vehicle of the Period, or
 - (d) An alternative transmission from the same vehicle manufacturer where the alternative transmission was fitted to a series production vehicle from that same manufacturer within the Period.
- (2) **Gear selection mechanism:**
 - (a) must be as per the transmission of the Period.
 - (b) The maximum number of forward gears shall be five(5).
 - (c) Internal transmission components are otherwise free.
- (3) **Final drive:** Free, provided that the original type of axle housing must be retained.
- (4) **Limited Slip Differential:** Free, provided that actuation may not be by electronic or external hydraulic means.
- (5) **Clutch and flywheel assemblies:** Free

4.4 Suspension:

- (1) **Springs and dampers:** Free, provided that the original or homologated type (eg; Macpherson strut, leaf spring etc) is retained. Where coil over type rear suspension is fitted it is permitted to remove the original leaf spring.
- (2) Remote gas canisters type dampers (shock absorbers) are not permitted.
- (3) **Anti-roll bars:** Free to be added, removed or substituted.
- (4) **Suspension Bushes:** Free.

- (5) Rear axle location may reflect Period modification. ie; it is allowed to utilise four(4) trailing link rear axle location, Panhard Rod, Watts Linkage etc.

4.5 Brakes:

- (1) Dual circuit braking systems are permitted, as is the installation/removal of vacuum power assistance.
- (2) Brake lining material and hydraulic hoses are free.
- (3) Drum brakes may be replaced by Disc brakes. Rotors must be constructed only of ferrous material.
- (4) Pedal boxes enabling adjustable brake bias are permitted.
- (5) Hydraulic handbrakes are permitted.

4.6 Steering System: Free.

4.7 Electrical system: Free.

4.8 Road Wheels & Tyres:

- (1) Wheel diameter may be varied by no more than two(2) sizes up or down from the manufacturer's specifications. Otherwise, wheels are free.
- (2) **Tyres:** Free.

5 Minimum Weight:

5.1 The following scale of weights represent the overall minimum weights of cars as they cross the finish line, fuel weight deducted:

Capacity	Weight (Kg)
Up to 500cc	495
Up to 600cc	535
Up to 700cc	570
Up to 850cc	615
Up to 1000cc	655
Up to 1150cc	690
Up to 1390cc	720
Up to 1600cc	775
Up to 2000cc	845
Up to 2500cc	920
Up to 3000cc	990
Up to 3500cc	1050
Up to 4000cc	1115
Up to 4500cc	1175
Up to 5000cc	1225
Up to 5500cc	1280
Up to 6000cc	1330
Up to 6500cc	1365
Up to 7000cc	1405
Up to 7500cc	1425
Up to 8000cc	1445
Over 8000cc	1530

Reason:

To revise the schedule to incorporate the recommendations by the Rally Commission.

This amendment is issued for MotorSport New Zealand Inc by the Administration.



B. Budd
General Manager