

# PART A

## SCHEDULE TL<sup>©</sup>

### V8s TECHNICAL REGULATIONS

### 2009 - 2010

#### PREAMBLE

The V8s category is MotorSport New Zealand's Premier Championship category. Introduced in 1995 this Holden versus Ford V8 Championship continues to go from strength to strength. From the outset the philosophy was to create a tightly 'controlled' technical specification that would provide for close and competitive racing combined with an arena for developing driver and race team skills, whilst overall maintaining costs within reasonable bounds.

The Series was granted Championship status in the 1996/97 season and has evolved as the production variants of both marques have changed season by season.

The Class Technical Committee in conjunction with MotorSport New Zealand and feedback from competitors review these regulations on an annual basis to ensure that the future and viability of V8 Touring Car racing is assured, whilst maintaining the costs within the bounds of the category philosophy.

The category continues to enjoy a unique relationship of self governance, with MotorSport New Zealand and Championship Promoters, The MotorSport Company working with the category management to maintain the status and profile of the category.

#### GENERAL INFORMATION

- New additions to this Schedule are **highlighted** such.
- Text changes for grammatical and formatting reasons are not highlighted.
- Diagrams are referenced by the regulation article number.
- All references in the articles to V8s *control parts* are detailed in *italics* in the article concerned with the article reference in the right-hand column.
- This Schedule shall be read in its entirety and shall take precedence over Appendix 2 Schedule A of the 'National Sporting Code' excepting where an item is not specifically covered within Schedule TL, in which case Appendix 2 Schedule A will apply.
- Only modifications authorised within the text of Schedule TL may be made to the Series Production Car.

## 1.0 GENERAL CONDITIONS

- 1.1 Control and Interpretation:** MotorSport New Zealand is solely responsible for the control of the V8s Technical Regulations and their interpretations. All enquiries relative to these regulations shall be directed to the officially appointed Championship Scrutineer – please refer article 9.0.

**These regulations disallow any modification that is not specifically defined hereinafter.** Hence any modification to the Series Production Car, or any part or component that is not specifically detailed by these regulations, or subsequent MotorSport NZ documents amending these regulations, is expressly forbidden.

The primary function of any component, even where specified as free, is the overriding factor in determining its compliance with these regulations. Any secondary function/s, unless specifically authorised is forbidden.

The only work that may be carried out on the car is that necessary for its normal servicing, or for the replacement of parts worn through use or accident, solely using parts allowed for under these regulations.

The article 'Notes' as referenced in the left-hand column of the articles shall have the same authority as the article concerned.

- 1.2 Logbook:** All cars competing in the V8s Championship series shall have a valid MotorSport NZ logbook.

- 1.3 Telemetry:** All forms of data transmission from the moving car are forbidden excepting two-way voice communication between the driver and the pit-based team. Impulse generators for lap timing are authorised, provided they are separate parts that have no connection with the operation of the vehicle.

Data transmission is permitted from a competing vehicle to acquire data for the Series TV provider for the purposes of event promotion and race commentary. The fitting of these sensors is to be reported to the Championship Scrutineer and be contained in the technical report for the meeting.

Only with prior authorisation from the Championship Coordinator, data transmission may also be permitted from a competing vehicle to acquire video footage for the purposes of team promotion. This data must not include any vehicle instrumentation. Two-way voice communication with the driver is authorised for promotional purposes but may only take place during testing, warm-up and safety car periods. Approval for fitment of these sensors must be obtained from the Championship Scrutineer and be contained in the technical report for the meeting.

- 1.4 Eligible cars:** The following base model body-shells of Holden Commodore and Ford Falcon are eligible under these regulations;

- Holden Commodore VT, VX or VY.
- Ford Falcon AU.

## 2.0 DEFINITIONS

2.1 Definition of terms used within this Schedule shall be referenced from the National Sporting Code, Appendix Two Schedule A, and as detailed below:

- '**MSNZ**' means MotorSport New Zealand Inc.
- '**as cast**' means as the original manufacturer cast and supplied the product.
- '**cockpit**' means the structural inner volume which accommodates the driver and passenger.
- '**freely sourced**' means may be purchased from any supplier.
- '**fasteners**' means nuts, bolts, studs, washers, screws and pop rivets.
- '**grout**' means the application of a filler to the cylinder block waterways around the cylinder bores.
- '**hand-finishing**' means changing the shape and/or surface finish of a component part by any means.
- '**knife-edging**' means rounding, bevelling or shaping of leading or trailing edge of the web or counter weights
- '**poly V belt**' means a single mechanical drive belt with multiple V shape construction
- '**protective clothing**' means overalls, gloves, underwear, balaclava, socks and footwear.
- '**promotional rides**' means the taking of passengers for rides at a circuit.
- '**race-trim**' means the condition in which the car competes and shall include all vehicle fluids and the driver including helmet, HANS® and all protective clothing.
- '**reclaimed**' means returned to manufacturer's original specification.
- '**Series Production Car**' 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.
- '**shot peening**' means a process of impacting 'shot' on the surface of component parts to relieve tensile stresses whereby causing a change to the mechanical properties of the surface. The process creates plastic deformation, not abrasion or coating of the component surface.
- '**single 'V' belt**' means a single mechanical drive belt of singular V shape construction that tracks in a mating corresponding single groove in the pulleys.
- '**undertray**' means a device fitted under the car that can affect the vehicles aerodynamics.
- '**valve seat**' means the area that the valve head comes into contact with the cylinder head and is established using engineers marking blue on the contact faces.

### 3.0 CONTROL PARTS

- 3.1 These regulations categorise and regulate *CONTROL PARTS* as follows:
- 3.2 *Control parts*; being parts that are fully controlled in respect of their specification and application.
- 3.3 Where specified, *control parts* shall be fitted.
- 3.4 *Control parts* are categorised as follows:
- **Category 1 control parts**; shall not be modified, altered, reclaimed, painted, coated or changed in any way. Additionally, any form of abrasive cleaning is prohibited.
  - **Category 2 control parts**; may only be modified as specifically detailed within the article in question. The extent of the modification will be clearly stated.
- 3.5 MSNZ may require proof of purchase of *control parts*, by way of an invoice or other authenticated document from the control supplier.

### 4.0 TECHNICAL DECLARATIONS

- 4.1 **Car Declaration (1x required per car per V8s Championship)**; A 'Car Declaration' form is included as part of these regulations (Part P(1)) and must be fully completed (for each individual car entered in the V8s Championship) and returned to the Championship Scrutineer prior to the first Round entered. This form must be received and approved by the Championship Scrutineer prior to the car in question becoming eligible to compete in the V8s Championship. All enquiries regarding the Technical Declaration should be directed to the Championship Scrutineer.
- 4.2 **Engine Declaration (1x required per car per Round of the V8s Championship)**; An 'Engine Declaration' form set is included as part of these regulations (Part P(2)) and must be fully completed (for each individual car entered in the V8s Championship) and returned to the Championship Scrutineer prior to the first Round entered. For any subsequent engine changes an 'engine declaration' form must be completed in full and submitted to the Championship Scrutineer prior to use of the changed engine. Spare 'Engine Declaration' forms are available from the Championship Scrutineer.
- 4.2.1 **An engine identification seal / number will be applied to each engine (maximum of two (2) engines at any one time), by the Championship Scrutineer or his appointed assistant.** This will be the identity number of the engine and shall be detailed on the 'Engine Declaration' Form. It is the Competitors' responsibility to ensure that the applied identification seals remain intact for the duration of the Championship Series.

### 5.0 MSNZ DATA LOGGING

- 5.1 This technical schedule specifies a maximum engine speed and controlled gear ratios for all competing cars.
- 5.2 As part of the V8s Championship entry a MSNZ data logger will be provided, designed to measure a number of parameters including engine speed and gear ratio. **The data logger shall be operational during all Round testing, qualifying sessions and races.**

**5.3** It is the Competitors responsibility to:

- Purchase and install a spark sensor, a crankshaft position sensor, and a rear hub speed sensor together with the wiring harnesses as per the fitting instructions detailed in Part N of this schedule.
- Mount the logger box (as provided by the Championship Scrutineer at first Round entered) in accordance with the instructions in Part N of this schedule.
- Ensure that the equipment is operating during all Round testing, qualifying sessions and races.
- Ensure that the equipment is kept in good condition while in their possession.
- Ensure that the data logger box is immediately returned to the Championship Scrutineer or his appointed representative, at the conclusion of the last race of the season or last Round attended.

**5.4 FAILURE TO RETURN THE DATA LOGGER BOX WILL INVOKE A MONETARY PENALTY.**

**5.5 Retrieving data:** At the conclusion of any testing, qualifying sessions and/or races, if requested by the Championship Scrutineer and/or a MSNZ Technical Officer, the Competitor shall make their car available for data retrieval. Additionally, these nominated officials may swap data loggers at their discretion.

**5.6** Where the data logger (box) has sustained damage that the Championship Scrutineer or MSNZ Technical Officer deems the responsibility of the Competitor, it shall be considered a technical infringement and be reported to the Event Director and/or MSNZ who may impose penalties in accordance with the National Sporting Code, which shall include all repair costs.

## **6.0 MSNZ CHAMPIONSHIP SEALS**

**6.1** V8s Championship seals (category 'C' seals) may be applied to the following components and/or any additional assemblies of components, at any time, at the sole discretion of either the Championship Scrutineer or Technical Officer / Nominated Official:

- Cylinder Heads (both) - by one head bolt/stud & a hole through the cylinder head casting
- Timing chain cover to cylinder block - by two adjoining bolts
- Inlet manifold to cylinder head- by two adjoining bolts
- Carburettor to inlet manifold - by two adjoining bolts/studs
- Rear axle differential cover - by two adjoining bolts
- Richmond / Borg Warner gearbox side cover - by two adjoining bolts, or
- Jerico gearbox tail-shaft housing – by two tail-housing bolts.

It is the Competitor's responsibility to ensure that the above detailed assemblies have bolts / studs / flanges pre-drilled with 3mm holes, to enable wire seals to be affixed as & when required.

**6.2** A category 'C' seal remains valid for 30 days after the last Round of the V8s Championship Race Series in which it was applied and this includes the non-championship Hamilton Round.

**6.3 Types of Championship Seal:** Seals may be in the form of;

- Wire and aluminium crimp seal, or
- Wire security seal with identification tag, or
- Paint (reaction type), or
- Tamper evident label.

6.4 For further information on seals refer to Schedule CH Article 29.

## 7.0 TYRES

- 7.1 Only such tyres that are specified from time to time by MSNZ as the “*control tyre*” may be used.
- 7.2 The *control* tyres are detailed in the *control parts* lists of this Schedule.
- 7.3 The requirements for tyre allocation and marking are detailed in the current Articles Governing the V8s Championship.

## 8.0 FUEL

- 8.1 A control additive shall be pre-mixed with the authorised fuel at a fixed dosage under the supervision of the Championship Scrutineer or MSNZ Technical Officer prior to collection (by the race team) from the appointed fuel supplier at the circuit. No other additives of any kind, specification, chemical description or composition shall be added to the fuel, nor may a blend of two or more fuels be used.

## 9.0 TECHNICAL ELIGIBILITY AND SAFETY EQUIPMENT ENQUIRIES:

- 9.1 Each V8s Championship Season a V8s Championship Scrutineer will be appointed by MotorSport New Zealand as per NSC 80. The Championship Scrutineer shall have the authority;
- 9.2 The Championship Scrutineer for the 2009–2010 V8s Championship is;

**Contact details:** Barry Carrington  
**Mobile:** 0274 418 682  
**Fax:** MotorSport NZ 04 801 8558  
**E-mail:** [B.G.Carrington@xtra.co.nz](mailto:B.G.Carrington@xtra.co.nz)  
**Mail:** C/o MotorSport NZ, P.O. Box 3793, Wellington.

- 9.3 All enquiries regarding category ‘C’ seals shall be submitted in writing (preferably by e-mail) to the above named person:

All enquiries regarding interpretation of these regulations shall be submitted in writing to the above named person detailing the article in question and the specific subject matter.

A written reply will always be given to a written enquiry.

**Note:** On matters of technical eligibility or safety compliance, a verbal statement or agreement will have no validity.

## 10.0 SCRUTINEERING AUDIT

**10.1** At each Round of the V8s Championship, safety audit inspections will be performed by the Championship Scrutineer, and/or appointed Technical Officers and/or Licensed Scrutineers, prior to the qualifying sessions commencing.

**10.2** **Competitor responsibility;** Competitors shall make their car available for scrutineering audit on the request of the Championship Scrutineer, a Technical Officer or a Licensed Scrutineer as follows:

- With all equipment that is to be used during the event,
- In a clean condition, and
- With the MSNZ logbook available.

## 11.0 HOT LAPS

**11.1** The following safety equipment is required, and shall be presented for inspection by the Championship Scrutineer (or their duly appointed Technical Officer / Licensed Scrutineer) as early as possible prior to the hot laps commencing. The Championship Scrutineer (or their duly appointed Technical Officer / Licensed Scrutineer) must provide approval by way of (hot laps decal) prior to the vehicle becoming eligible to be used for hot laps;

The passenger safety equipment shall be fitted as per the requirements for the driver, refer Parts B or C Article 7 Occupant Safety Equipment;

- Competition Seat, refer Part B or C Article 7.4 (1), (2) and (3).
- Safety Harness, (compliant FIA standard or SFI specification).
- Protective Padding shall be fitted, refer Part B or C Article 7.2 (4).
- Overalls - clean protective one-piece, with close-fitting front, cuffs and ankles manufactured only in fire retardant or self-extinguishing materials.
- Protective Helmet, (compliant with a current Schedule A recognised standard).

**Note:** The use of *control tyres* is not mandatory when the car is used for hot laps at a Round of the Championship Series.