

SCHEDULE TL[©]

PART A

BNT V8s

CLASS TWO

TECHNICAL REGULATIONS

2017-2018

PREAMBLE

The BNT V8s Championship is MotorSport New Zealand's Premier Championship category. Introduced in 1995 this Holden versus Ford V8 race series was granted Championship status in the 1996/97 season slowly evolving as the production variants of both Marques have changed season by season.

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.

On an annual basis MotorSport New Zealand together with the Class' Technical Committee study these regulations and discuss proposals submitted by the race teams in order to maintain parity, up-spec safety requirements and to ensure that the future and viability of BNT V8 Car racing is assured, whilst overall maintaining the running costs within the bounds of the category philosophy.

The 2013 season saw the introduction of the New Generation NZV8 Car, which will lead the MotorSport New Zealand Premier Championship Race Series into future seasons of competitive and exciting racing. The technical regulations for the New Generation BNT V8s are published under their own schedule being "**Schedule TC1**".

GENERAL INFORMATION

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

1.0 GENERAL CONDITIONS

- 1.1 Control and interpretation of these Technical Regulations:** MotorSport New Zealand is solely responsible for the control and interpretation of these technical regulations. All enquiries relative to these technical regulations shall be directed to the appointed Championship Scrutineer and/or the MSNZ Technical Department - refer Article 8.0.

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 MSNZ 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 Championship series shall have a valid MSNZ 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 / Hot Laps' 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 MSNZ DATA LOGGING

- 4.1 As part of the Championship entry a MSNZ data-logger may be provided, designed to measure a number of parameters including engine speed and gear ratio. **The data logger (when fitted) shall be operational during all Round testing, qualifying sessions and races.**
- 4.2 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.
 - Ensure that the sensors are fitted during all testing, qualifying sessions and races.
 - Ensure that the equipment is kept in good condition while in their possession and returned promptly after the last Round entered.
- 4.3 **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.
- 4.4 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 Clerk of the Course who may impose penalties in accordance with the National Sporting Code, which shall include all repair costs.

5.0 MSNZ CHAMPIONSHIP SEALS

- 5.1 **Official Seals** shall be referred to hereinafter as 'C' (Championship Category Seals). The definitive text is detailed in Appendix Two, Schedule A of the current MotorSport NZ Manual.
- 5.2 The Championship Scrutineer shall undertake a seal application / checking program at each Round of the Series (prior to the Qualifying Session).
- 5.3 Championship seals (category 'C' seals) may be applied to the following engine components:
- Cylinder heads - by one head bolt/stud and a hole through each cylinder head casting
 - Timing chain cover to cylinder block - by two adjoining bolts
 - Inlet manifold to cylinder head - by two adjoining bolts
- 5.4 It is the Competitor's responsibility to ensure that the above detailed assemblies have bolts / studs / flanges pre-drilled with 3 mm holes, to enable wire seals to be affixed.
- 5.5 All enquiries regarding Championship seals shall be directed (in writing, preferably email) to the Championship Scrutineer and/or the MSNZ Technical Department – refer Articles of Championship for contact details.

6.0 TYRES

- 6.1 Only such tyres that are specified from time to time by MSNZ as the "*control tyre*" may be used.
- 6.2 The *control* tyres are detailed in the *control part* lists of this Schedule.
- 6.3 The requirements for tyre allocation and marking are detailed in the current Articles of Championship.

7.0 FUEL

7.1 Only fuel as specified by MotorSport NZ as the control fuel for the Championship is authorised. The fuel for the 2017 / 2018 Championship Series is;

- GULL Force 10 as supplied at the circuit by BNT V8s

An additive, being 'NULON lead substitute', may be added to the fuel, although this must be done under the supervision of the Championship Scrutineer or MSNZ Technical Officer. 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.

8.0 TECHNICAL ELIGIBILITY AND SAFETY EQUIPMENT ENQUIRIES

8.1 Each season MSNZ shall appoint a Championship Scrutineer as per NSC 80. The Championship Scrutineer shall have the authority and responsibilities as detailed in the Articles of Championship - 3.1.2.

8.2 The Championship Scrutineer for the 2017-2018 Championship Series is;

Daniel Cresswell

8.3 All enquiries regarding these regulations shall be submitted in writing (preferably by e-mail) to the Championship Scrutineer and/or MSNZ Technical Department;

Daniel Cresswell	MSNZ Technical Department
029 456 2102	Terry – 021 378 446
daniel@csystems.co.nz	technical@motorsport.org.nz

9.0 SAFETY AUDIT

9.1 At each Round of the 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.

9.2 **Competitor responsibility;** Competitors shall make their vehicle available for safety audit on the request of the Championship Scrutineer, Technical Officer or Event Scrutineer as follows:

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

10.0 HOT LAPS

10.1 The following safety equipment for the passenger is required, and shall be presented for inspection by the Championship Scrutineer, and/or Technical Officer, and/or Event Scrutineers as early as possible prior to the hot laps commencing. The Championship Scrutineer shall provide approval by way of (windscreen marking) prior to the vehicle becoming eligible to be used for hot laps:

- **Competition seat**, compliant to FIA Standard 8855-1999 and mounted in accordance with Part B or C Article 7.4(2) and 7.4(3).
- **Safety harness**, with a minimum of 4 straps, compliant with FIA / SFI Std and mounted in accordance with Part B or Part C Article 7.3 and Schedule A Article 4.4.

- **Protective padding** shall be fitted, refer Part B or C Article 7.2(4).
- **Protective helmet** – in compliance with Schedule A requirements.
- **Overalls** – in compliance with Schedule A, meaning clean protective one-piece, with close-fitting front, cuffs and ankles manufactured only in fire retardant or self-extinguishing materials.
- Suitable **footwear** that provides complete coverage of both feet.

Note: *The use of control tyres is not mandatory when the vehicle is used for hot laps*