

## BMW Race Driver Endurance Series

### Endurance regulations- Open Classes- GT C, GT B, GT A - Effective for the 2017 / 2018 Season.

#### 1 - GENERAL DESCRIPTION

This class is intended to provide a series for BMW race cars to compete in as an alternative to the closely controlled technical regulations of the BMW E30 and 2.0 litre classes. This Open group is intended to include factory built Group A cars, Factory BMW MINI Challenge, 2.0 Litre SuperTourers, NZ Touring Cars, as well as other locally built rally or circuit cars. It is also intended to encourage the building of further BMW race cars by providing race meetings in which they can compete.

- 1.1 Entry to the BMW Race Driver Endurance Series (BRDS) is by invitation only, at the discretion of the Committee.
- 1.2 All entrants must be current financial members of the BMW Car Club of NZ.
- 1.3 Presentation of cars must be to a high standard and the organizers reserve the right to refuse entry to cars deemed not up to standard. This requirement also applies to vehicles previously accepted for the BRDS where their condition has deteriorated to the point where this is not of an acceptable standard.
- 1.4 The following regulations provide a basic outline of the technical requirements for cars running in the Open Classes. **NB: Drivers planning to purchase or modify a car to race in the BMW Race Driver Series are strongly advised to contact the BMW Race Driver Endurance Series Committee via e-mail: [bmwraceseries@hotmail.com](mailto:bmwraceseries@hotmail.com) for confirmation of the car's eligibility before committing to the modification/purchase.**
- 1.5 The BRDS Committee and its appointed agents will be judge(s) of fact regarding general vehicle eligibility for the Series and regarding any specific technical details of those cars.

#### 2 - SAFETY REQUIREMENTS

All vehicles are required to adhere to all MotorSport New Zealand (MSNZ) regulations in relation to Driver and Vehicle Safety – refer to MSNZ Manual no. 35, Appendix Two, Schedule A, available in hard copy or on-line: [www.motorsport.org.nz/Regs/manual.htm#Manual35](http://www.motorsport.org.nz/Regs/manual.htm#Manual35). This includes any amendments or subsequent versions issued by MSNZ. The required Safety Equipment includes:

- 2.1 An MSNZ approved competition seat designed for use with four-point, five-point or six-point harness; with appropriate mountings; must be fitted according to App Two, Sch A, Section 4.7.
- 2.2 A suitable MSNZ approved harness of either four-point, five-point or six-point mounting as detailed in App Two, Sch A, and Section 4.4.
- 2.3 An MSNZ approved hand held fire extinguisher is mandatory as per App Two, Sch A, Section 4.8.
- 2.4 A multi-point roll cage as per App Two, Sch A, Section 4.6 with side intrusion bars is mandatory. Alternative roll cages are acceptable, provided they meet the following criteria: -
  - a) The roll cage design, construction and installation must satisfy all of MSNZ regulations.
  - b) Triangulation between the roll cage front legs and front strut towers is permitted.
  - c) Roll cage padding must be fitted as required in App Two, Sch A section 4.6 sub section 6.

2.5 Glass headlamps should be covered with protective tape, in accordance with any relevant MSNZ requirements.

2.6 All cars must have a current log book.

2.7 **Forward Head Restraints (FHR):** These are considered mandatory

A) All Drivers must wear FHR during all qualifying and races that are part of the BMW Race Driver series.

Failure to do so may result in penalties (Points deduction) or even Disqualification.

B) FHR Devices must:

1. Comply with an approved standard, and
2. Be a good fit on the wearer, and
3. Be of the correct type/angle for the vehicle being driven, and
4. Be in good condition, free of cracks or signs of damage, and
5. Not be modified, except as specifically permitted by the manufacturer, and
6. Only be used with helmets bearing one (1) of the following standard markings:

- **FIA** - 8860 & 8858,
- **Snell** - SAH 2010, SA 2010, SA 2005 & SA 2000,
- **British Standard** - BS 6658-85 A/FR, and
- **SFI** - Spec 31.1/2005 & Spec 41.1/2005.

C) **Approved Forward Head Restraint Standards:** Examples of the following standards labels are detailed in Part Two Article 4 of this Schedule.

- **FIA** - FIA8858-2002
- **FIA** - FIA8858-2010
- **SFI** - SFI Spec 38.1

Examples of acceptable FHR device brands (not limited to): HANS type, NexGen, Simpson Hybrid, Leatt.

Examples of non-acceptable devices: Padded collars.

To be fitted and worn in accordance with Schedule A in the MSNZ guidelines

### **3 – TECHNICAL / VEHICLE ELIGIBILITY**

3.1 This class is generally open to **any model BMW car fitted with a BMW engine**. Factory built BMW Mini Challenge vehicles will also be allowed provided they run the same engine and drive-train specifications as originally built and competed.

Left or Right-hand drive vehicles are eligible including cars that have been converted.

3.2 **Engines:** Must be a production BMW cylinder block and head casting, all other components are free. Engine Capacity must have a minimum of 2200cc. The exceptions are vehicles applying under Section 3.6, those mentioned in the “General description” (2.0 Litre SuperTourers, NZ Touring Cars) and BMW Mini Challenge cars. If you are not sure, please contact the BMW Race Driver Series.

3.3 For normally aspirated models it is permissible to use a BMW engine transplanted from another model BMW, even if it has a larger or lower: displacement, number of cylinders and or valves.

3.4 It is permissible to move the engine within the factory engine bay only. It is not permissible to remove, cut or modify the factory firewall/bulkhead in order to move the engine rearwards in the chassis, even for low-volume models covered under section 3.6

### 3.5 **Forced Induction:**

Turbo-charged / Forced induction cars will only be accepted at the discretion of the Committee. It is mandatory that entrants obtain clearance before building any forced induction cars.

To be considered, a Turbo/ Forced induction vehicle must meet all of the following criteria:

- a) The car model must have been originally available as a Turbo-charged/ Forced Induction version. By definition, "model" means the body type, such as 2002, E21, E34, etc.
- b) The car is/was a low volume run by BMW specialist tuners Hartge, Alpina or Schnitzer
- c) The engine block must have the same number of cylinders as the original engine, but there is no restriction on capacity.
- d) The cylinder head from the original engine must be used. eg E92 must use N54 head.
- e) The number of turbochargers cannot be greater than the original model. ie One turbo can be used on a model that originally had two, but not the other way around.

In all cases, a written application must be submitted with full details of the vehicle specifications. (Engine, transmission, differential, chassis, bodywork, brakes, suspension, etc) The car will be considered and either approved in full, approved with required modifications or rejected outright.

These cars **MUST** be BMW-powered - no exceptions will be made for cars that have engines from any other manufacturer.

- 3.6 **Chassis:** Original unit construction body shells must be used. No space-framed or semi space-framed cars will be allowed. The original floor-pan between the firewall and rear bulkhead (behind the rear seat) must remain as per the manufacturer's original specifications. Save for the fitment of the roll protection, pedal box or exhaust system, further modifications to this area of the floor-pan can only be made with the written permission of the BRDS Committee.
- 3.7 **Bodywork:** Outer body panels may be replaced with items of a different design or material (including composites) to that used on the original. This includes the addition of front or rear spoilers, wings, splitters, wheel arch extensions and/or after-market body kits.
- 3.8 **Drive train:** Gearboxes are free in terms of manufacturer, number of gears, ratios or shift mechanism. Differentials are free.
- 3.9 **Suspension:** As long as the original configuration is retained (eg McPherson strut, trailing arm) the suspension is free in terms of design and materials used.
- 3.10 **Brakes:** There is no restriction on type and materials.
- 3.11 **Wheels:** Rim widths can be no more than 10 inches, but there are no other restrictions in terms of wheel diameter, materials or construction type.
- 3.12 **Tyres:** This is a free item as long as the safety and technical requirements of MSNZ and the meeting organisers are met.
- 3.13 **Weight:** Typically, there will be no minimum weight for any cars competing in the Open class, unless this is stipulated as a condition of entry for a vehicle given discretionary entry under section 3.6.
- 3.14 **Fuel:** There are no restrictions on the fuel used as long as the safety and technical requirements of MSNZ and the meeting organisers are met.

## **4 – COMPETITION CATEGORIES**

The Open Class comprises three different race categories: Group GT C, GT B and GT A.

Drivers must pre-register for Groups GT C, GT B, GT A before the start of the race meeting. Cars must carry the appropriate signage for the class (see 4.2d below)

Cars / drivers not specifically registered for Group GT C, GT B, GT A will automatically be included in Group GT A.

Points will be awarded on the OVERALL finishing place within each individual class, (see Open Class Endurance Race Format document for further details)

### **Class Definitions**

Group GT C: For cars that are 2190cc to 2996cc and built to the technical regulations in the document

Group GT B: For cars that are 2997cc to 3997cc and built to the technical regulations in the document

Group GT A: For cars that are 3998cc and over and built to the technical regulations in the document

**Note:** Engine capacity equivalence factors will be applied as follows:

- Forced induction x 1.7
- Engines with ITB's (independent Throttle Body's) x1.1
- Diesel forced induction x 1.5

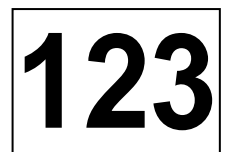
## **4 – SIGNAGE**

4.1 **Series Sponsor Decals**– The following decals are mandatory and must be fitted as supplied to race cars at all BMW Race Driver Series events. (see Appendix 1)

- a) **BMW Race Series number box** – both sides, front door, within 40mm of front edge of door.
- b) **Windscreen Banner** –top of front windscreen, using a minimum 100mm of the supplied banner, including the logos, and up to the full width of the banner. (approx 200mm)
- c) **Bonnet Decal** (580 x 135mm) – centreline of bonnet, no more than 75 mm from BMW bonnet badge and oriented so that the writing is the correct way up, as viewed from in front of the car.

4.2 **Other BMW Race Driver Series Signage** – The following signage, to be supplied by the competitor unless stated otherwise, must be fitted to race cars at all BMW Race Driver Series events.

- a) **Race Number** (if not already printed onto number box) Both sides, inside number box. Must comply with MSNZ requirements in terms of size, colour, font, etc. Minimum of 280mm high, stroke of 50mm, solid black (on the supplied white background), font to be Helvetica, or similar. See Manual 35, Appendix Two, Schedule A, Section 6.2 for clarification, Helvetica font is shown.
- b) **Driver Name** – The driver surname (at least), on both rear side windows, close to lower edge, minimum of 80mm high, 10mm stroke, white or fluoro yellow/green in Helvetica or similar font.



- c) Screen Numbers – both front and rear screens, passenger side upper corner, minimum of 150mm high, 20mm stroke, white or fluro yellow/green in Helvetica or similar font.
- d) Race Group Markings – to assist with identification of the cars for weigh-in, and for commentary purposes, Group GT C, GT B and GT A cars will carry Colored indicators in the corners of the front windscreen banner and the rear windscreen to confirm the race group each car is competing in.

**GT C = Fluro Orange**

**GT B = Fluro Green**

**GT A = Fluro Yellow**

- e) Novice Markings – The use of the FIA standard “Black X on a yellow background”. This will be provided by the BMW RDS. Regardless of previous race experience in other classes drivers who are new to the BMW Race Driver Series must carry This Sticker for the Season



4.3 **Personal Signage** – The following restrictions apply to any personal signage or sponsorship carried on cars competing in the BMW Race Driver Series.

- a) Front Screen – This area is reserved exclusively for the Series sponsor (TBA) and apart from screen numbers (see 5.2c) no other signage can be carried on the front screen. If the supplied screen banner is not deep enough, cars are permitted to have an additional screen band fitted, but this must be a plain colour, with no lettering or graphics, and must be fitted below the complete screen banner.
- b) Rear Screen–Personal advertising may be fitted to the rear screen, as long as it complies with all MSNZ regulations for vision and safety and to WOF regulations, if applicable.
- c) Number Boxes – No signage at all shall be fitted to the front doors in the area immediately above or below the official race number box, or within 50mm either side of the box. It is permissible however to carry personal signage anywhere on the sills provide it complies with all other regulations regarding signage, including.
- d) Competitive Signage – No signage for any brands that compete with any of the series sponsors can be carried on the front section of the car - defined as being all panels “forward of a line through the rear edge of the number boxes on each door”. The Series committee decisions on any conflicting advertising are final, as are any decisions to introduce new/additional series sponsors.

## Appendix 1– Vehicle Livery (Refer Section 4)

### a) Race Number Box

To be located on the front doors, within 40mm of the front edge of the door panel.

### b) Windscreen banner

May be deeper than 100mm, but plain colour only

### c) Front screen number\*

Passenger side, white or fluoro yellow/green



### c) Bonnet decal

Centred, no more than 75mm from bonnet badge



### d) Rear screen number\*

Passenger side, white or fluoro yellow/green



### e) Novice Sticker

Below race number or a highly visible location on the rear of the car



### f) Race Group (See Section 4)

Open GT/ A / B / C, Rear screen, below race number.



### g) Driver Name\*

Both sides, bottom of rear side window

### h) Race Group (See Section 4 section E)

Open GT C, GT B, GT A. Front and rear windscreens



\* = Items to be supplied by Driver/entrant