



**2022 Z Cars Racing & New Generation Production BMW Championship**  
Sporting & Technical Regulations



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Draft - Subject to Motorsport UK Approval



# 2022 Z Cars Racing & ~~New Generation Production BMW~~ Championship Sporting & Technical Regulations

## 1. SPORTING REGULATIONS - GENERAL

### 1.1 Title & Jurisdiction:

The 2021 Z Cars Racing & ~~New Generation Production BMW~~ Championship is organised and administered by MotorSport Vision Racing in accordance with the General Regulations of Motorsport UK (incorporating the provisions of the International Sporting Code of the FIA) and these Championship Regulations.

Motorsport UK Championship Permit No: **CH2021/R127**  
Race Status: Interclub

Motorsport UK Championship Grade: C

### 1.2 Officials:

1.2.1 Co-ordinator: Julian Newman

1.2.2 Eligibility Scrutineer: Nigel Hoyle

1.2.3 Championship Stewards: Brian Hemmings  
Bill Shewan  
Mike Dixon  
Chris Norman

Any three of the above may reach a decision.

1.2.4 Clerk of the Course: Simon Gnana-Pragasam or his nominated Deputy.

### 1.3 Competitor Eligibility:

1.3.1 Entrants must

- a) be fully paid up members of MSVR and
- b) be in possession of a valid 2022 Motorsport UK Entrants Licence.

1.3.2 Drivers and Entrant/Drivers must:

- (a) Be current Members of MSVR and
- (b) be Registered for the Championship and
- (c) be in possession of valid Competition (Racing) Club status Licence, *as a minimum or*
- (d) be a professional driver, in possession of a valid Licence (featuring an E.U. flag) and medical, issued by the ASN of a member country of the European Union, or comparable country.  
(H)26.2.1. applies)

1.3.3 All necessary documentation must be presented for checking at all rounds when signing-on.

1.3.4 Membership of MSVR is free on entry into an event.

### 1.4 Registration:

1.4.1 All drivers must register as competitors for the championship by April 1<sup>st</sup> 2022 using the on-line registration system at [www.p8r.co.uk/p8r](http://www.p8r.co.uk/p8r) and paying the registration fee. Competitors registering after this date will not be eligible for points in 2022.

1.4.2 The Registration Fee is £150 - Made payable to:- Project 8 Racing Club

1.4.3 Permanent Competition numbers for the Championship will be advised prior to the first round.



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- 1.4.4 Registrations for the Championship will be accepted from 1st January 2022 until the 1<sup>st</sup> April. Thereafter registrations will be accepted but competitors will be ineligible for points
- 1.4.5 The organisers reserve the right to decline any driver's registration for the championship. The organisers may withdraw a registration at any time, should the inclusion of the competitor or team be deemed by them not to be in the best interests of the championship subject to an appeal to Motorsport UK and in accordance with Regulation H30.1.3 (b).

### **1.5 Championship EVENTS:**

The Championship will be contested over races at the following race meetings:

<b>Date</b>	<b>Circuit</b>	<b>Organising Club</b>	<b>Qualifying Races <sup>1</sup></b>
12/13 March	Silverstone GP	BARC	1
9/10 April	Donington National	MSVR	2
21/22 May	Cadwell Park	MSVR	2
18/19 June	Snetterton 300	MSVR	2
6/7 August	Brands Hatch Indy	MSVR	2
10 September	Silverstone Nat	MSVR/Equipe	1
8 October	Snetterton 300	MSVR	2

[Note <sup>1</sup> – The number of races at this event that qualify for Championship points.]

- 1.5.1 In the event of Force Majeure, the Championship Organisers reserve the right to reduce the total number of Championship rounds.

### **1.6 Scoring:**

- 1.6.1 a) Points will be awarded as follows :

6 or More Starters in Class :

1st=20 points. 2nd=16 points. 3rd=13 points. 4th=11 points. 5th=10 points. 6th=9 points. 7th=8 points. 8th=7 points, 9th=6 points, 10th=5 points, 11th to 15th=3 points, 16th-20th=2 points. 21st+ = 1 point.

5 starters in Class :

———— 1st=15 points, 2nd=11 points, 3rd=8 points, 4th=6 points, 5th=5 points

———— 4 or less starters in Class

———— 1st=10 points, 2nd=7 points, 3rd=5 points, 4th=4 points.

- 1.6.2 Competitors may only count a maximum of two scores in any race weekend.
- 1.6.3 Ties shall be resolved using the formula in W1.3.4 in the current Motorsport UK Yearbook.
4. Where the race distance has been reduced (2.6.) it shall still count as a full points scoring round.
5. Competitors not registered for the Championship may be permitted on an individual round basis and will:
- be deemed "Guest Competitors"
  - not score points and for the purpose of points scoring will be ignored
  - not qualify for Event awards
  - comply with the eligibility criteria as prescribed in Article 1.3. above, with the exception of 1.3.1. (a) and 1.3.2. (a and b), as appropriate.
- 1.6.6 Competitors may drop any two rounds, whether entered or not, from their final total of points that they may count towards their position in the Championship.

### **1.7 Awards:**

- 1.7.1 All awards are to be provided by Project 8 Racing Club.



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- 1.7.2 Per Round: Trophy to winner, 2<sup>nd</sup> & 3<sup>rd</sup> place
- 1.7.3 Championship: Trophy to winner, 2<sup>nd</sup> & 3<sup>rd</sup> place
- 1.7.4 Presentations:

Garlands and Trophies are to be provided for presentation at the end of each race or at an end of the meeting presentation ceremony.

- 1.7.5 Entertainment Tax Liability.

Prize money and Bonuses shall be posted to the Entrants within 7 days of the results being declared final after each event.

In accordance with current government legislation, the Project 8 Racing Club is legally obliged to withhold tax at the basic rate on all payments to non-UK resident sportsmen/women and account to HMRC using form FEU1, the quarterly return of payments made to non-resident entertainers and sportsmen/women.

That is, those persons who do not have a normal permanent residence in the UK. The UK does not include the Isle of Man, Channel Islands or Eire. This means that, as the organiser, the [\*] is required to deduct tax at the current rate applicable from any such payments they may make to non-UK residents.

Under certain circumstances, it may be possible for competitors to enter into an agreement with the Inland Revenue to limit the tax withheld. Any application for such an arrangement must be made in writing and not later than 30 days before the payment is due.

For further information contact:- HMRC Personal Tax International, Foreign Entertainers Unit, St John's House, Merton Road, Liverpool L75 1BB. Tel: 0151 472 6488 F 0151 472 6483.

- 1.7.6 Title to all Trophies:

In the event of any Provisional Results or Championship Tables being revised after any provisional presentations and such revisions affect the distribution of any awards the Competitors concerned must return such awards to the Championship Coordinator in good condition within 7 days.

## **2. CHAMPIONSHIP EVENT MEETINGS & RACE PROCEDURES**

### **2.1 Entries:**

- 2.1.1 Competitors are responsible for entering races via the on-line entry system and paying the correct entry fees prior to the entry closing dates which shall be three days before each round.
- 2.1.2 Incorrect or incomplete entries (Including Driver to be Nominated Entries) are to be held in abeyance until they are complete and correct and the date of receipt for acceptance of entry purposes shall be the date on which the Secretary of the Meeting receives the missing or corrected information or fee.
- 2.1.3 Any withdrawal of Entry or Driver/Car changes made after acceptance of any entry must be notified to the Secretary of the Meeting in writing. If Driver/Car changes are made after publication of Entry Lists with Final Instructions the Competitor concerned must apply for approval of the Organisers.
- 2.1.4 The Entry Fee for each event shall be specified in the SRs and/or on the on-line entry system.
- 2.1.5 Reserves will be listed in the Final List of Entries published with Final Instructions or in a Bulletin.  
i) All Reserves will practice and replace withdrawn or retired entries Reserve Number order irrespective of class.



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- ii) If Reserves are given Grid Places prior to issue of the first Grid Sheets for any round the times set in Practice shall determine their grid positions.
- iii) If Reserves are given places after publication of the grid sheet and prior to cars being collected in the Official "Assembly Areas" they will be placed at the rear of the Grid and be started without any time delay.
- iv) Otherwise, they will be held in the Pitlane and be released to start the race after the last car to start the GREEN FLAG LAP or last car to take the start has passed the startline or pitlane exit, whichever is the later.  
Such approval to start MUST be obtained from the Clerk of the Course.

### 2.2 Briefings:

Organisers should notify Competitors of the times and locations for all briefings in the Final Instructions for the meetings. Competitors must attend all briefings.

### 2.3 Qualification Practice:

- 2.3.1 Should any Practice session be disrupted the Clerk of the Course shall not be obliged to resume or re-run the session; the decision of the Clerk of the Course shall be final.
- 2.3.2 Each driver shall complete a minimum of 3 laps in the car to be raced, and in the correct session, in order to qualify (Motorsport UK Regulations Q12.4)
- 2.3.3 The grid for the first race will be formed by the fastest lap, the grid for Race 2 by the finishing position in Race 1.
- 2.3.4 In order to ensure fairness in qualifying sessions, the position in which cars leave the assembly area may be issued with the entry list.

### 2.4 Races:

Should any race be disrupted the Clerk of the Course shall not be obliged to resume or rerun the race ((Q)12.15.) (1.6.4. above applies)  
The standard minimum scheduled duration shall be 15 minutes whenever practicable but should any race distance be reduced at the discretion of the Clerk of the Course or Stewards of the Meeting it shall still count as a full points scoring round. In the event that race durations are longer, this will be announced in Final Instructions for the particular event.

### 2.5 Starts:

- 2.5.1 All cars will be released to form up on the grid prior to the start in formation as specified on the grid sheet.
- 2.5.2 The start will be via Standing start  
The minimum Countdown procedures/audible warnings sequence shall be:-

Standing Start

Start Procedure: **In normal circumstances there will not be a green flag/formation lap.**

1. There will be a minimum elapsed period of 3 minutes from cars being released from the Assembly Area to the start of the race;
2. A 'one minute' board will be shown on the startline; engines should be started at this stage. A '30 second' board will be displayed followed by a '5 second' board;
3. Approximately 5 seconds after this board is withdrawn the red lights will be switched on; after between 2 seconds and 7 seconds they will be switched off to start the race.

**Any change in the above procedure will be detailed in Final Instructions, by bulletin or by drivers briefing.**



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- 2.5.3 Any car removed from the grid after the 1 minute stage or driven into the pits on the Green Flag lap shall be held in the pitlane and may start the race after the last car has passed the startline or pitlane exit, whichever is the later to take the start from the grid.
- 2.5.4 Any drivers unable to start are required to indicate their situation as per Motorsport UK Regulation Q 12.11.2
- 2.5.5 In the event of any starting lights failure the Starter will revert to use of the National Flag.

### 2.6 Session Red Flag

Should the need arise to stop any race or practice, RED LIGHTS will be switched on at the Startline and RED FLAGS will be displayed at the Startline and at all Marshals Signalling Points around the Circuit.

This is the signal for all drivers to cease circulating at racing speeds, to slow to a safe and reasonable pace and to return to the pit lane, during practice, and to the starting grid area, during a race, unless otherwise directed by officials.

Cars may not enter the Pits unless directed to do so. Work on cars already in the Pits must cease when a race is stopped.

### 2.7 Pits, Paddock & Pitlane Safety:

- 2.7.1. Pits & Paddock: Competitors must ensure that the Motorsport UK, Circuit Management and Organising Club Safety Regulations are complied with at all times.
- 2.7.2. Pitlane: The outer lane or lanes are to be kept unobstructed to allow safe passage of cars at all times. The onus shall be on all Drivers to take all due care and respect the pit lane speed limits.
- 2.7.3. Refuelling: May only be carried out in accordance with the Motorsport UK General Regulations, the Organising Club Regulations, Circuit Management Regulations and the SRs or Final Instructions issued for each Circuit/Meeting.
- 2.7.4. Speed Limit: Pit Lane Speed Limit will be 60 Km/h unless otherwise notified.

### 2.8 Race finishes:

After taking the Chequered Flag drivers are required to:

- I. progressively and safely slow down
- II. remain behind any competitors ahead of them,
- III. return to the Pit Lane Entrance/Paddock Entrance as instructed,
- IV. comply with any directions given by Marshals or Officials
- V. keep their helmets on and harnesses done up while on the circuit or in the pitlane.

### 2.9 Results:

All Practice Timesheets, Grids, Race Results are to be deemed Provisional until all vehicles are released by Scrutineers after Post Practice/Race Scrutineering and/or after completion of any Judicial or Technical Procedures. (Motorsport UK regulation (D)26.3.)

### 2.10 Timing Modules

- 2.10.1 All competitors will be required to fit Electronic Self Identification Modules to their cars for the purposes of accurate timing. It will be the responsibility of the competitor to fit these in the car in the position and manner specified. The Modules must be in place and functioning correctly for all Championship qualifying practice sessions and races. The setting and servicing of these items must only be carried out by properly authorised Motorsport UK licensed Timekeepers. See Motorsport UK Regulation Q.12.8.1 for further information.



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2.10.2 Competitors may not place electronic timing equipment within five metres of the official Start, Finish or any other official timing lines at any event or test session/day. Any such equipment placed within these zones will be removed.

**2.11 Qualification Races:** In the event of the need for any qualification races, the procedures will be as published in the Final Instructions for the events concerned. In the event of Qualification Races being run, the fastest lap point (1.6.1) does not apply for the Qualification Race.

**2.12 Operation of Safety Car (in accordance with Motorsport UK Section Q, Appendix 3)**  
The Safety Car will be brought into operation and run in accordance with Section Q, Appendix 3 of the Motorsport UK General Regulations.

### 2.13 ONBOARD CAMERAS

2.13.1 All competitors in the Championship will be required to carry an on board in car camera for the primary purpose of safety. Footage from the cameras may be used where there is an incident which is subsequently brought before the Clerk of the Course for investigation. The decision to review any such video footage is at the discretion of the Clerk of the Course, the Stewards of the Meeting, the Championship Stewards or the Project 8 Racing Club Committee.

2.13.2 Registered competitors must provide and fit an in-car video recording camera, capable of providing event video images. The camera must be positioned to ensure that the driver, the internal brake light and a clear external view forward are within the recorded images. The images must be stored in MP4 - a common video data format that does not require specialist software in order to be viewed.

2.13.3 It is the competitor's sole responsibility to ensure safe installation and effective operation of the camera equipment. The camera should record continuously whenever the ignition system is live, so that no manual intervention is required. Video images from the camera must be made available to the organisers or Project 8 Racing Club Committee upon request. In the event of an investigation requiring access to the images, the competitor is responsible for carrying and fitting an alternative memory card should one be needed whilst this activity is completed.

2.13.4 In the event that no data is available on request (other than due to a proven defect with the equipment) sanctions may be applied. The burden of proof to establish the cause of such failure will lie with the competitor.

Sanctions in accordance with Motorsport UK Regulation C2.1.1 may include but are not limited to:

A fine of up to £775

Exclusion

2.13.5 The Clerk of the Course may also refer the matter to the Championship Stewards for further sanctions including but not limited to loss of Championship points.

2.13.6 The Project 8 Racing Club Committee may also review footage as it deems may be necessary.

2.13.7 At all times cameras must be fitted in accordance with Motorsport UK regulations and be approved by the Chief Scrutineer in accordance with J.5.20.5

### 3. SPECIFIC CHAMPIONSHIP PENALTIES:

#### 4.1 Infringements of Technical Regulations:

4.1.1 Arising from post practice Scrutineering or Judicial Action:

Minimum Penalty: The provisions of Motorsport UK regulations: C.3.3

4.1.2 Arising from post race Scrutineering or Judicial Action:

Minimum Penalty: The provisions of Motorsport UK regulations: C 3.5.1 (a) & (b)





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For infringements deemed to be of a more serious nature the Clerk of the Course will invoke the provisions of Regulation C 3.5.1 (c)

### **4.2 Additional specific championship penalties:**

Infringements of non-technical Motorsport UK Regulations and the Sporting Regulations issued for the Championship in accordance with the 2021 Motorsport UK Judicial Procedure Regulations, as amended by these Championship Regulations.

In order to maintain standards of conduct, the championship coordinator will monitor all officials / observers reports of adverse behaviour at race meetings. If any individual is included on two such reports during one racing season the championship coordinator will notify the organisers who will issue a written warning that his / her driving behaviour is to be specifically observed at future race meetings. Any adverse reports during this period of observation could result in further action & may result in a championship steward's enquiry, with possible loss of championship points and refusal of further race entries.

i) Single Qualifying Session, Single Race: At any meeting, event, official practice, qualifying or race, where any competitor shall be found guilty of the offence covered by Motorsport UK Regulation C 1.1.5 "Driving in a manner incompatible with general safety, etc", where the Clerk of the Course imposes a penalty greater than a reprimand they shall forfeit all points in the championship gained solely at that event to the point during the event & shall be ineligible to score any points for the remainder of that event.

ii) Multiple Qualifying / Multiple Race: In the case of double header races or multi-races, where the offence referred to in (i) above are committed during any practice or qualifying session(s) or the first race, then points gained for the qualifying session(s) & the first race will be forfeited. Where an offence occurs during any subsequent race then the points solely gained for that race shall be forfeit.

iii) Should two separate offences referred to in (i) above be committed, then all points shall be forfeited for that whole event, irrespective of the timing of the offence committed at that event. Where a 'double header' event takes place at the same venue over a weekend & is conducted as two separate race days then this regulation shall only apply to each day individually.

In the event that these penalties are imposed, the competitor is obliged to count the event(s) as one contributing to their overall Championship position.

Penalty points will be reflected in Championship Points. Therefore each Penalty Point imposed will also deduct 3 Championship Points against that driver, even if this results in a negative score.

4.2.1 The Clerk of the Course may impose a Stop & Go or Drive Through penalty for infringements of the regulations in accordance with Motorsport UK Regulation Q 12.26.

### **4.3 Infringements of non-technical Motorsport UK Regulations and the Sporting Regulations issued for the Championship:**

As per current Motorsport UK Judicial Procedure Regulations.

## **5. TECHNICAL REGULATIONS**

### **5.1 INTRODUCTION**





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- 5.1.1. The following technical regulations are set out in accordance with the MOTORSPORT UK specified format and it should be clearly understood that if the following texts do not clearly specify that you can do something, you should work on the principle that you cannot.
- 5.1.2. Cars must comply with the technical regulations published by the organisers of Z Cars & ~~NG Production BMW~~ Championship (hereafter known as ZCARS) throughout official practice, qualifying and events.
- 5.1.3. ‘STANDARD’ : The word standard used within these technical regulations as a description of components is to be interpreted as per ‘standard part’ defined in Section B - Nomenclature & definitions in the current MOTORSPORT UK yearbook.
- 5.1.4. Specified components in the technical regulations are not permitted to be modified beyond repair or adjustment processes specified by the manufacturer.
- 5.1.5. The Championship organisers reserve the right to review and alter technical regulations as required. Competitors will be informed of any changes by release of a bulletin issued by the Championship organisers only.
- 5.1.6. Unless specified otherwise, the following regulations apply.

### 5.2 CLASSES

Cars will run in 1 Classes:

<del>CLASS A</del>	<del>Z Cars Racing Z4 3.0 &amp; NG PBMW E90 325i</del>
<del>CLASS B</del>	<del>Z Cars Racing Z3 1.9</del>

~~Should one particular model within Class A prove to have unequal performance within Class, the organisers reserve the right to review data a maximum of three times during the Championship season and to introduce performance equalising measures accordingly. These measures may involve adjustment of weight or performance controlling equipment to any or all of the models.~~

### 5.3 GENERAL DESCRIPTION

5.3.1 The Championship is for competitors participating in BMW Z4, ~~Z3~~ & E90 vehicles as set out below.

~~BMW Z4 : E85 Roadster 3.0L 231BHP model (2003-2006) Pre-Facelift ONLY. M54B30 engine, 6 speed manual transmission.~~

~~BMW Z3 : E36/7 Roadster 1.9L 140BHP model (1995-1999) Narrow Body Pre-Facelift ONLY. M44B19 engine, 5 speed manual transmission.~~

~~BMW E90 325i : E90 Saloon 2.5L 215BHP model (2005-2007) Pre-Facelift ONLY. N52B25 engine, 6 speed manual transmission.~~

The Championship is intended to provide close racing between drivers and is not a technical challenge for preparation experts. If you are contemplating any modifications about which you are unsure, you should contact the Championship organisers. You should assume that unless a modification is specifically permitted, that any modification is prohibited.

5.3.2 Drivers must enter the Championship in a nominated class as specified on the registration form. If a change of model is desired during the season, permission must first be requested from and approval given by the organisers.



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Cars must be presented to a high standard. Excessive corrosion, poor paintwork or significant bodywork damage may result in exclusion from the race / practice entered.

Scrutineers may fit data logger systems for their information only. Competitors are responsible for removing any parts and ensure that they have the tools and personnel available to complete the task as required by MOTORSPORT UK officials. MOTORSPORT UK officials may remove the data card from the camera of any car.

### 5.4 SAFETY REQUIREMENTS

5.4.1. All MOTORSPORT UK Yearbook Section K Safety Regulations apply as relevant, and the following :

- i) A suitable FIA approved competition seat with integral lateral head restraints designed for use with a 6 point harness and with the appropriate mountings must be fitted according to regulation K 2.2
- ii) A suitable harness of 6 point design and carrying an in-date FIA approved label must be fitted in accordance with regulation K 2.1.4
- iii) The use of an approved FHR is mandatory.
- iv) A plumbed in fire extinguisher is required as detailed in regulation K 3.2 of minimum capacity 3.5L or 2.0kg for gas systems.

### 5.4.2.

- i) A roll cage as defined by MOTORSPORT UK regulation Section K 1.6.1 must be fitted. Custom Cages BZ4/10C (Z4 model), ~~BZ3/02C (Z3 model)~~ are recommended/mandated for Z4 & Z3 ~~models.~~ The Cyclone Cages E90 Bolt-In Cage is recommended for E90 325i model. Protective padding must be fitted as per MOTORSPORT UK requirements within Section K 1.3.6 & K 1.6.6
- ii) All cars must be fitted with an interior brake light wired to the vehicles brake light switch and mounted securely to the dashboard and be in clear view of the on-board camera at all times.
- iii) All cars must be fitted with a wide-angle rear view mirror securely mounted to the roll cage with a minimum 14" length.

### 5.5 GENERAL TECHNICAL REQUIREMENTS & EXCEPTIONS

5.5.1. All vehicles must comply with the relevant requirements of the prevailing MOTORSPORT UK yearbook Sections J and Q along with the following model specific regulations below.

5.5.2. There should be substantial towing straps securely fixed to the main structure of the vehicle, front and rear, to enable the vehicle to be moved in accordance with MOTORSPORT UK regulation Q13.1.3. For the avoidance of doubt, this precludes the use of the standard towing eye in its standard location and competitors must find an alternative.

5.5.3. Engines , gearboxes and differential units must be prepared for sealing prior to the first ZCARS&NGPBMW racing event that the vehicle participates in. 1.6mm holes must be drilled through two adjacent screws/studs. The fasteners selected for the sealing must be capable of providing a sealing for the selected components. The competitors may be requested to alter the fasteners and their location so this procedure can be made more secure.

5.5.4. Components as deemed necessary with be sealed by Z&NGPBMW organisers from the first event. Should the competitor or entrant require a seal to be removed they must request the permission of the Championship organisers who will then organise for the re-seal at the first opportunity.



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5.5.5. Pattern parts meeting original manufacturer's specification are permitted. It is the competitor's responsibility to prove a replacement part is of the same design and material as the original manufactured item. Parts and chassis shall not be lightened by the use of shot blasting, acid dipping or any other methods to reduce weight.

### 6. ~~SPECIFIC TECHNICAL REGULATIONS FOR BMW Z4 3.0L~~

#### 6.1 CHASSIS

- A) The chassis must remain as per manufacturer specification in construction and material
- B) Reinforcing, removing or adding material to the chassis in any way other than to facilitate mounting of the seat or the fitting of the mandatory fitment roll cage is prohibited.
- C) Chassis must be fitted with the mandatory fitment roll cage as per regulation 5.4.2 i)
- D) Removal of underbody and seam sealant for the purpose of chassis weight saving is strictly prohibited other than as required to facilitate mounting of seats and mandatory fitment roll cage.
- E) Chassis must not be seam welded for strengthening purposes
- F) No additional bracing, strut braces or other similar devices may be fitted with the exception of aftermarket front strut brace to replace OEM front strut brace.

#### 6.2 INTERIOR / BODYWORK

##### 6.2.1 Modifications Permitted

##### 6.2.1.1 Interior

- A) All interior sound proofing and insulation may be removed from the vehicle interior
- B) Steering locks must be removed/disabled if the vehicle is not road registered and driven to the circuit.
- C) Removal of all non-required items along with their sub-systems and corresponding wiring from the vehicle interior as listed below is permitted :

All interior trim (excluding dashboard, instrument cluster, and lateral dashboard support frame)

Standard roll-over hoops (Must only be removed by roll-cage fitting centre)

Airbag system

Stereo system, speakers and aerial

Glove box

Centre Console

Electric mirror controls

Seat belts

Carpets

Clock / Trip Computer

Standard seats

Headlight adjusters

Cruise control

Heater controls

Handbrake controls (if handbrake cables and shoes are to be removed)

Alarm system

Interior lighting

Standard door cards

Tool kit

Central locking system components

Redundant metal brackets for components no longer in use



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- D) The heater matrix/box and corresponding wiring/pipework may be removed, it is recommended to use a bypass kit. An alternative form of windscreen demising is highly recommended for competitor safety.
- E) Fitment of a wide angle rear view mirror is mandated as per regulation 5.4.2 iii
- F) Fitment of an interior brake light is mandated as per regulation 5.4.2 ii
- G) A roll cage must be fitted as per regulation 5.4.2 i
- H) A fire extinguisher system must be fitted as per regulation 5.4.2 iv
- I) Door cards must be fitted with a minimum thickness of 3mm and be of solid continuous material such as ABS plastic or aluminium, and door latches must remain fully operational from within the vehicle interior.
- J) An FIA approved racing seat must be fitted as per 5.4.1 i
- K) A shift light kit may be fitted
- L) An auxiliary gauge kit may be fitted to the vehicle interior
- M) A front windscreen blower kit may be fitted to aid demising in cold conditions. This is not mandatory but is highly recommended for safety of visibility.

### 6.2.1.2 Exterior

- A) All exterior and under body soundproofing, heat shielding and insulation may be removed, with reference to section 6.1
- B) Removal of non required items along with their sub-systems and corresponding wiring from the vehicle exterior as listed below is permitted :

Soft top hood

Power hood mechanism (if fitted)

Radio aerial

Spare wheel & carrier

Front fog lights

Horn

Number plate mounting plastics & number plates

Number plate mounts and trim

Inner wheel arch liners

Standard vehicle under tray

Headlamp wash/wipe

- C) Fitment of a hardtop roof is permitted but not mandated.
- D) Fitment of replacement body panels as long as they are to standard OEM specification is permitted
- E) Only E85 Z4 2003-2006 vehicle body style is permitted
- F) DVLA registration plates must be removed when vehicles are on circuit
- G) Fog light blanking plates may be used
- H) Mounting of towing straps to the vehicle structure using a minimum of M12 bolts is mandated as required by the current MOTORSPORT UK yearbook.
- I) Extinguisher and battery isolator push buttons / pull cables must be fitted to the vehicle as per the current MOTORSPORT UK yearbook.
- J) Standard bonnet catch mechanisms can be removed completely to be replaced with suitable aftermarket fasteners
- K) Bonnet and boot opening struts may be removed but is not mandated
- L) Fitment of rear spoiler parts CCR-Z4RSM-01, CCR-Z4RST-01 and fitment of front splitter part CCR-Z4FRSP-01 are permitted.

### 6.2.2 Modifications Prohibited

#### 6.2.2.1 General



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- A) Modifications to the vehicle beyond those permitted within section 6.2.1 are strictly prohibited
- B) Taping or smoothing of joints between panels is prohibited , other than to help secure a body part temporarily after an incident during the event.

### 6.2.2.2 Interior

- A) Electric windows must remain fitted and be operable by the driver whilst seated and strapped in
- B) Removal of seam sealer within the passenger compartment is prohibited other than as required to facilitate fitment of the roll cage and seat mountings as per 6.1
- C) Vehicle interiors must be in good condition with no sharp edges and fit for purpose

### 6.2.2.3 Exterior

- A) Removal of vehicle underbody sealant is strictly prohibited except for localised areas to facilitate fitment of a seat mount or roll cage as per 6.1
- B) Removal of the front and rear bumper crash bars/supports are strictly prohibited
- C) Front windscreen wipers (both) must remain fitted and operable as per original fitment
- D) Side windows must remain as per OEM fitment glass and both must remain fully operable
- E) Vehicle silhouette must remain as standard 2003-2006 BMW Z4 E85 specification with no additional modifications except for 2 x rear spoiler modification parts : CCR-Z4RSM-01 & CCR-Z4RST-01 and 1 x front splitter CCR-Z4FRSP-01
- F) Engine under trays other than the standard fitment type (p/n 51717028433) are prohibited. Repairs maintaining the OEM shape/thickness/profile are acceptable.

### 6.3 Ground Clearance

- A) Vehicle ground clearance at any point must be no lower than the minimum saloon car MOTORSPORT UK regulations as per section J 5.20.11 following the end of any official qualifying or race session.
- B) Ride height must be measured with the driver seated , tyres fully inflated and in full race trim including all fluids

### 6.4 Engine

#### 6.4.1 Permitted Modifications

- A) Engines may in the future need to be modified to receive a lock wire kit which would be installed by the ~~Championship organisers~~ competitor, and this may be under the supervision of the Championship organisers/scrutineer. Competitors are expected to have the equipment readily available to complete the task at the circuit at any time.
- B) To facilitate the removal of the standard heater box / matrix the vehicle may be fitted with the heater bypass kit
- C) The Carbon / Charcoal canister may be removed and bypassed
- D) Throttle body heater pipes may be removed and the system bypassed
- E) Engine mountings may be replaced with aftermarket alternatives
- F) Engines must not have their ECU control systems replaced but mapping is free. ECU must be re-programmed at the competitors expense by Hybrid Tune Ltd, Eye, Suffolk; with the official Championship map and the Hybrid Tune seal must remain fully intact. The wiring loom associated with the ECU must remain as standard. Only one engine ECU is allowed to be in the car for the full duration of the practice/race.
- G) Air conditioning system components may be removed in full if originally fitted
- H) Additional sensors to allow for additional dashboard / instrument functions are permitted



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- I) Crankshaft journals may be machined for the purpose of re-grinding after a failure only with big end and main bearing journals allowed to be ground to facilitate fitment of oversize bearing shells in +0.25mm and +0.5mm sizes only
- J) Oil pump upgrade kit CCR-Z4OPU-01 may be fitted to aid longevity of the oil pump, or the oil pump nut may be modified to accept lock wire to prevent loosening but no other modifications are permitted
- K) The VANOS oil pipe (p/n 11361705532) must remain as per standard fitment. Modifications of any kind are not permitted.

### 6.4.2 Prohibited Modifications

- A) Engine balancing or machining beyond standard OEM specification is strictly prohibited
- B) Skimming of cylinder head and/or block for the purpose of increasing compression ratio (CR) is strictly prohibited. Any engines to be found running a CR outside of the tolerance specified within the BMW Technical specification must be fitted with a head gasket of an increased thickness with BMW part number 11127501305 with an uncompressed thickness of 1.00mm (+0.30mm oversize)
- C) When replacing the cylinder head gasket of standard thickness type, the gasket must be replaced using the standard fitment BMW part number 11127501304 with an uncompressed thickness of 0.70mm
- D) Removal Modification through addition or removal of material or polishing to match gaskets, modify inlet or exhaust ports, combustion chambers or any other component within the cylinder head is prohibited.
- E) Valve-train components must be to OEM specification including but not limited to; springs, rockers lifters, retainers and VANOS system.
- F) Camshaft timing must be as per OEM specification and all locking tools must fit correctly with the crank and cam shafts aligned as per BMW Technical specification.
- G) Camshafts must be OE BMW only and not aftermarket type.
- H) Inlet and Exhaust valves must be of Standard OEM specifications only and valves/seats must be cut as per BMW Technical specifications
- I) Pistons must be OEM Standard size 83.955 mm as per BMW Part Number 11257506222 for Z4 3.0. Modification through addition or removal of material/coating is prohibited. The connecting rods must be as per standard fitment of OEM type BMW Part Number 111241437210 Z4 3.0. Modification through addition or removal of material is prohibited except for 5 grammes for balancing purposes to OEM specification is permitted.
- J) Modifications to the engine to alter OEM oil pressure are strictly prohibited, and the oil pump, pressure relief valve and all restricting holes/orifices are to remain standard in size and type.
- K) All Engine Sensors must remain as per standard and operate as the manufacturer intended, with the exception of the modifications permitted within these regulations.
- L) Crankcase ventilation system must remain as per OEM fitment.
- M) The engine and any of its components must not be modified in any way other than specified.
- N) The throttle body must operate as per OEM
- O) Any modifications other than those specifically allowed are viewed as prohibited and therefore illegal.
- P) Additional oil sump baffles or windage trays of any type are not permitted.
- Q) Crankshaft Damper must remain as per standard BMW Part Number 11237513862 currently, and be in good condition.
- R) The standard fitted location of the engine must be retained and not modified in any way, although aftermarket engine mounts may be used.
- S) Engine mounting points must not be modified in any way.

### 6.4.3 Oil/Water Cooling

- A) A standard radiator cooling fan must be fitted and fully operational to OEM specifications as per BMW Part Number 17427519704.





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- B) The water cooling system must remain as per standard fitment with the exception of modifications allowed within 6.4.1
- C) The radiator must be as per OEM fitment design and be the same type as BMW Part Number 17119071517 or CCR-Z4FRAD-01
- D) Coolant hoses must remain as per standard construction, shape and material other than to bypass the heater and throttle body heaters as specified.
- E) An oil cooler for cooling engine oil temperatures is not permitted at this time.
- F) The engine water Thermostat must be of the same type as BMW Part Number 11531437040 and retain functionality at all times.

### 6.4.4 Induction Systems

Induction systems must remain fully as standard with the exception of :

- A) A propriety BMW E85 3.0 air filter element must be fitted in its entirety as per manufacturers instructions but make is free. The intake system from the non-atmospheric side of the air filter to the intake manifold must remain as per standard specification and layout. Heat and/or insulation wrap/barriers or any kind of thermal barrier coatings are not permitted.

### 6.4.5 Exhaust Systems

- A) The exhaust system must retain the standard right hand drive exhaust manifold and gasket arrangement and be of OEM BMW manufacture as per Part Numbers 18407518673 and 18407518674.
- B) The exhaust system may be partly replaced with a free flowing centre section.
- C) No other exhaust system modifications are permitted other than specified.
- D) Exhaust must be in good condition and complete with no leaks.
- E) Heat resistant wrapping or coatings are not permitted of any type.
- F) The OEM back box may be partially or fully cleared of internal materials but must comply with MOTORSPORT UK and / or circuit noise regulations.

### 6.4.6 Ignition Systems

- A) Ignition systems must remain standard fitment type with a OEM Specification Coil-on-Plug ignition coils and mandatory fitment spark plugs NGK BKR6QUP

### 6.4.7 Fuel Delivery Systems

- A) Fuel systems must be as per originally fitted on the vehicle including fuel filter, vent systems, unless the fuel lines are to be ran through the vehicle interior. It is permitted to run the fuel lines through the vehicle's interior, in which case the fuel line kit CCR-Z4FHK-01 may be used but is not mandated.
- B) Fuel rail pressure must be 3.5 bar as per the standard vehicle ~~within reasonable tolerance, and may be tested for compliance by a calibrated pressure tester by the Championship Organisers at any time during a ZCARS&NGPBMW Racing event.~~
- C) Fuel pressure regulator must remain as per original fitment in original location.

### 6.4.8 Engine Performance Testing / Engine Parity

- a) The Championship Organisers reserve the right to organise a group engine power test at a chosen venue, at any time using a chassis dynamometer. Vehicles must be transported directly to the power testing venue in a fully sealed specification in the same condition the vehicle finished the event, with no exceptions.





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- b) Should performance testing be found to identify a difference in one or more competitors vehicles outside of a reasonable pre-determined tolerance when compared to other vehicles on the group test or as previously tested by The Championship Organisers, then the right is reserved to retain the vehicle for further assessment and potential engine and other components strip down to verify compliance with the regulations.
- c) The Championship Organisers may use a 'Compression Ratio Tester' operated in a controlled manner to determine if any competitor's engines require further scrutiny and investigation.
- d) The Championship Organisers reserve the right to publish results found by performance testing or component analysis.

### 6.5 SUSPENSION

#### 6.5.1 Permitted Modifications

- A) Standard Front Suspension Top Mounts may be replaced with optional fitment parts CCR-GAZ-Z4FTM1 or 2
- B) Standard Rear Suspension Top Mounts may be replaced with optional fitment parts CCR-GAZ-Z4RTM
- C) Front and Rear suspension dampers must be replaced with Gaz Monotube units sealed for the ZCARS&NGPBMW Z4 cars by the manufacturer (kit number GMO434CC). Seals must be intact at all times.
- D) Front Suspension Main Spring - Spring rate and length is free.
- E) Rear Suspension Main Springs - Spring rate and length is free.
- F) Front Helper Springs and Rear Tender Springs are free
- G) Anti-Roll Bars must be the OEM type as fitted to M Sport specification BMW Z4 3.0's; 25mm Front ARB (BMW Part Number 31351096364). No modification by material changes, addition or removal of material is allowed. ARB's must function as per OEM
- H) Anti-Roll Bar drop links are free
- I) Suspension Bush material is free up to a Shore hardness of 90 Shore. Compliant bush material thickness must be as per originally supplied by the OEM manufacturer or a readily available commercial alternative.
- J) Suspension geometry is free ~~within adjustment ranges provided by the regulations~~ subject to compliance with all other regulations
- K) Front camber, castor and toe adjustments are achieved by use of the front suspension top mounts and offset front lower wishbone rear mounting bush only.

#### 6.5.2 Prohibited Modifications

- A) Suspension mounting points must remain as per OEM and must be unmodified.
- B) Suspension damper valving must remain as per originally supplied by GAZ
- C) Damper servicing must be carried out by GAZ Shocks to ensure all units are valved as supplied.
- D) Seals provided by GAZ Shocks must not be removed from suspension units. Any missing seals will render the vehicle ineligible for ZCARS&NGPBMW Racing.
- E) Spring types, damper types and fitted locations must conform with section 6.5.1.
- F) Front Anti-roll bars must be fitted at all times and secured correctly. No loosening or removal of Front Anti Roll Bar is permitted. Rear Anti-roll bars may be removed.
- G) All suspension components must remain as per original fitment unless specified.

#### 6.5.3 Wheelbase / Track

- A) Wheelbase must remain as per the standard vehicle (2495mm maximum)
- B) Maximum front track width is 1500mm measured from wheel centre to wheel centre
- C) Maximum rear track width is 1560mm measured from wheel centre to wheel centre



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- D) Wheel spacers up to maximum 15mm width may be used subject to B & C above but are discouraged. If wheel spacers are used, it is the competitors responsibility to ensure sufficient wheel stud / bolt thread is available to safely secure road wheels.

### 6.6 TRANSMISSIONS & DRIVE RATIO'S

#### 6.6.1 Permitted Modifications

- A) A solid flywheel conversion kit is permitted but not mandated. Solid flywheel conversions must only be carried out using CCR-Z4FSW-01
- B) Clutch must either be as per original OEM fitment or aftermarket replacement for fitment to dual-mass flywheel unless the solid flywheel conversion kit is fitted, in which case the clutch must be part number CCR-Z4CK-01 as supplied with the solid flywheel kit.
- C) Gearshift lever knob is free.
- D) Clutch fluid pipes may be replaced by braided types.
- E) The differential final drive ratio may be changed from 3.09:1 to 3.38:1
- F) A mechanical Limited Slip Differential unit may be fitted within the OEM differential casing
- G) Traction Control systems may be disabled or removed
- H) Transmission mounting bush material is free

#### 6.6.2 Prohibited Modifications

- A) The standard gearbox must remain fitted and retain the original ratios as specified in 6.6.3.
- B) No modifications are permitted to the drivetrain in any way other than those above and must remain as per OEM installation.
- C) Gear linkage must remain as per standard fitment.

#### 6.6.3 Gearbox Ratios

- A) Z4 3.0 Standard gearbox ratios must remain as per the original fitment 6 speed manual gearbox.

1st	=	4.35:1
2nd	=	2.50:1
3rd	=	1.66:1
4th	=	1.23:1
5th	=	1.00:1
6th	=	0.85:1

### 6.7 ELECTRICS

The standard wiring loom must be used. The only modifications permitted are to remove redundant wiring in accordance with items allowed to be removed / disabled within these regulations.

#### 6.7.1 Exterior Lighting

Exterior lighting must at minimum operate dipped headlights, rear sidelights, full beam, indicators front and rear, rear rain light(s), brake lights.

#### 6.7.2 Rain Light



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The rain light may be of an MOTORSPORT UK approved type securely mounted to the roll cage and clearly visible from the vehicle's rear with and without a hardtop roof, or the OEM rear fog lamps, suitably converted.

### 6.7.3 Batteries

Batteries can be of any technology and placement as long as they conform with the MOTORSPORT UK safety & isolation regulations.

### 6.7.4 Generators

- A) Alternators must be fully functional as per the OEM fitment at all times and provide battery charge whilst the engine is running.
- B) Alternator must be as per originally fitted type and no less than 80 AMP charge rate.

### 6.7.5 Starter Motors / Starting Systems

- A) Starter Motor must be as per OEM fitment part number 12412354693.
- B) Ignition and Start systems may be bypassed from standard key operation to use a switch panel

### 6.7.6 Transponder (Official Timing)

A transponder must be fitted in accordance with the current MOTORSPORT UK yearbook

## 6.8 BRAKES

### 6.8.1 Permitted Modifications

- A) The vehicle handbrake may be removed in its entirety (including shoes, mechanism, cables and handbrake lever) or retained in a fully operational state actuating on both rear wheels to MOT Standard.
- B) The brake disc backing plates may be removed from either or both axles.
- C) The front brake discs cannot exceed 325mm diameter and be of steel-Cast Iron construction but brand and model is free.
- D) The front pad is free.
- E) The rear brake discs must be of standard size (285mm diameter) and of steel Cast Iron construction but brand and model are free.
- F) The rear pad is free.
- G) Brake lines may be run through the vehicle interior subject to current MOTORSPORT UK yearbook regulations.
- H) Braided brake lines may be fitted to to the brake calipers
- I) Brake discs must not be used that are below the minimum disc thickness as stated by the manufacturer.

### 6.8.2 Prohibited Modifications

- A) ABS System removal.
- B) Any form of brake bias modification.
- C) Brake Calipers, Master Cylinders and Brake Servo's must be as per OEM fitment unless specified.
- D) Any form of non OEM fitment brake ducting is prohibited.



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### 6.9 WHEELS / STEERING

#### 6.9.1 Permitted Modifications / Options

- A) Permitted wheels are any BMW Z4 OEM 8j x 17" wheel or aftermarket 8Jx17 ET35 to ET15 wheels.
- B) Wheel stud kits may be fitted to aid removal/fitting of the wheels.
- C) Steering wheels may be replaced with a steering wheel of a race type including addition of a steering wheel boss kit as per part number to facilitate fitment as per MOTORSPORT UK regulations.
- D) A snap off type steering wheel boss may be fitted.
- E) Steering wheel height may be adjusted by altering the steering column mount spacing. If an adjustable steering column is fitted, it must be secured permanently by modifying the column and fastened using a bolt and locking nut only.

#### 6.9.2 Prohibited Modifications

- A) Steering rack must be of OEM fitment type for a BMW Z4 as per BMW Part Number 32116777507.
- B) Steering column universal joint must be of OEM fitment type.
- C) Power steering must not be disabled.

### 6.10 TYRES

#### 6.10.1 Tyre Specifications & Sourcing

Toyo Tires R888R GG Compound in 225/45/17 size are the only permitted tyre for any official practice, qualifying or race event.

Tyre are only to be sourced through the Nominated Tyre Supplier, details of which are on the [www.p8r.co.uk](http://www.p8r.co.uk) website.

Mike Stokes Motorsport  
01202 547555

Drivers should quote the Club (Project 8 Racing) and their race number to receive Club discounted pricing and for the Club to fulfil its sponsorship obligations.

#### 6.10.2 Tyre Usage

- A) Tyre buffing and shaving is strictly prohibited. The use of tyre heating / heat retention devices, tyre treatments and compounds is prohibited
- B) The original tyre tread pattern must remain visible at all times on all tyres at the end of each official practice, qualifying or race session.

### 6.11 WEIGHT

The minimum weight of the vehicle, including driver and protective equipment / apparel at the end of the session / race is 1350kg. There is no allowance for being under this weight. Competitors are advised to plan a margin of error to avoid exclusion from a session.

### 6.12 FUEL TANK / FUEL

#### 6.12.1 Fuel Tank Type & Location



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Fuel tank type must be as per original OEM type and fitment including the original fuel pump. Fuel tank and pump must be in the original location without modification

### 6.12.2 Fuel Type

Fuel must conform to MOTORSPORT UK definition of 'Pump Fuel' in the current MOTORSPORT UK yearbook. Octane boosters and fuel treatments are prohibited.

### 6.12.3 Fuel Testing

- A) All vehicles must complete the race with a minimum of 3 litres of fuel to allow for post-event analysis of competitors fuel which may be sampled following the completion of any session.
- B) Fuel dry-break sampling valves may be fitted to the fuel feed pipe within the engine bay but are not mandated.

### 6.13 SILENCING

All vehicles must comply with current MOTORSPORT UK regulations for silencing

### 6.14 NUMBERS

Race Numbers must comply with MOTORSPORT UK Regulation Q11.4

### 6.15 DECALS

To be eligible to compete, it is mandatory to display the following decals. These will include but are not limited to:

- i) MSVR, each front wing above indicator side repeater x2
- ii) P8R web address, rear quarter x 2
- iii) Toyo Tires, front screenstrip. Other than the numbers described in 5.17, no other text is permissible on the front screen.

A diagram showing placement of all required decals will be issued prior to the first event

- 6.15.1 Competition numbers will be obtained at the competitor's expense. One full set of championship decals will be supplied by Project 8 Racing. A charge may be made for replacement decals.

All Championship decals and Championship sponsors decals must be displayed in their entirety and in accordance with the diagram issued with decals.

- 6.15.2 Drivers are required to display an MSVR badge on their overalls. If available, these will be supplied by MSVR. Please note that they must be stitched only through the outer layer of the garment using fire retardant thread to avoid any scrutineering issues.

- 6.15.3 Competition numbers must be carried in the same dimensions and colour as those for the front screen on the upper right corner of the rear screen.

- 6.15.4 Front and rear windows may be covered with championship or personal sponsor livery to a maximum depth of 250mm from the top of the window, measured from the centre-line of the vehicle and must also comply with Q13.2.2. Where championship front or rear window championship decals are specified in 5.18.1, competitors may not additionally display personal sponsor decals in the position



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### 7. SPECIFIC TECHNICAL REGULATIONS FOR BMW Z3 1.9L

#### 7.1 CHASSIS

- A) The chassis must remain as per manufacturer specification in construction and material
- B) Reinforcing, removing or adding material to the chassis in any way other than to facilitate mounting of the seat or the fitting of the mandatory fitment roll cage is prohibited.
- C) Chassis must be fitted with the mandatory fitment roll cage as per regulation 5.4.2 i)
- D) Removal of underbody and seam sealant for the purpose of chassis weight saving is strictly prohibited other than as required to facilitate mounting of seats and mandatory fitment roll cage.
- E) Chassis must not be seam welded for strengthening purposes
- F) No additional bracing, strut braces or other similar devices may be fitted with the exception of aftermarket front strut brace to replace OEM front strut brace.

#### 7.2 INTERIOR / BODYWORK

##### 7.2.1 Modifications Permitted

##### 7.2.1.1 Interior

- A) All interior sound proofing and insulation may be removed from the vehicle interior
- B) Steering locks must be removed/disabled if the vehicle is not road registered and driven to the circuit.
- C) Removal of all non-required items along with their sub-systems and corresponding wiring from the vehicle interior as listed below is permitted :

All interior trim (excluding dashboard, instrument cluster, and lateral dashboard support frame)

Standard roll-over hoops (Must only be removed by roll-cage fitting centre)

Airbag system

Stereo system, speakers and aerial

Glove box

Centre Console

Electric mirror controls

Seat belts

Carpets

Clock / Trip Computer

Standard seats

Headlight adjusters

Cruise control

Heater controls

Handbrake controls (if handbrake cables and shoes are to be removed)

Alarm system

Interior lightling

Standard door cards

Tool kit

Central locking system components

Redundant metal brackets for components no longer in use

- D) The heater matrix/box and corresponding wiring/pipework may be removed, it is recommended to use a bypass kit. An alternative form of windscreen demising is highly recommended for competitor safety.
- E) Fitment of a wide angle rear view mirror is mandated as per regulation 5.4.2 iii





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- F) Fitment of an interior brake light is mandated as per regulation 5.4.2 ii
- G) A roll cage must be fitted as per regulation 5.4.2 i
- H) A fire extinguisher system must be fitted as per regulation 5.4.2 iv
- I) Door cards must be fitted with a minimum thickness of 3mm and be of solid continuous material such as ABS plastic or aluminium, and door latches must remain fully operational from within the vehicle interior.
- J) An FIA approved racing seat must be fitted as per 5.4.1 i
- K) A shift light kit may be fitted
- L) An auxiliary gauge kit may be fitted to the vehicle interior
- M) A front windscreen blower kit may be fitted to aid demisting in cold conditions. This is not mandatory but is highly recommended for safety of visibility.

### 7.2.1.2 Exterior

- A) All exterior and under body soundproofing, heat shielding and insulation may be removed, with reference to section 7.1
- B) Removal of non required items along with their sub-systems and corresponding wiring from the vehicle exterior as listed below is permitted :

Soft top hood

Power hood mechanism (if fitted)

Radio aerial

Spare wheel & carrier

Front fog lights

Horn

Number plate mounting plastics & number plates

Number plate mounts and trim

Inner wheel arch liners

Standard vehicle under tray

Headlamp wash/wipe

- C) Fitment of a hardtop roof is permitted but not mandated.
- D) Fitment of replacement body panels as long as they are to standard OEM specification is permitted
- E) Only narrow body pre-2000 facelift vehicle body style is permitted
- F) DVLA registration plates must be removed when vehicles are on circuit
- G) Fog light blanking plates may be used
- H) Mounting of towing straps to the vehicle structure using a minimum of M12 bolts is mandated as required by the current MOTORSPORT UK yearbook.
- I) Extinguisher and battery isolator push buttons / pull cables must be fitted to the vehicle as per the current MOTORSPORT UK yearbook.
- J) Standard bonnet catch mechanisms can be removed completely to be replaced with suitable aftermarket fasteners
- K) Bonnet and boot opening struts may be removed but is not mandated
- L) Fitment of rear spoiler parts CCR-Z3RSM-01, CCR-Z3RST-01 and fitment of front splitter part CCR-Z3FRSP-01 are permitted.

### 7.2.2 Modifications Prohibited

#### 7.2.2.1 General

- A) Modifications to the vehicle beyond those permitted within section 7.2.1 are strictly prohibited
- B) Taping or smoothing of joints between panels is prohibited, other than to help secure a body part temporarily after an incident during the event.



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### 7.2.2.2 Interior

- A) Electric windows must remain fitted and be operable by the driver whilst seated and strapped in
- B) Removal of seam sealer within the passenger compartment is prohibited other than as required to facilitate fitment of the roll cage and seat mountings as per 7.1
- C) Vehicle interiors must be in good condition with no sharp edges and fit for purpose

### 7.2.2.3 Exterior

- A) Removal of vehicle underbody sealant is strictly prohibited except for localised areas to facilitate fitment of a seat mount or roll cage as per 7.1
- B) Removal of the front and rear bumper crash bars/supports are strictly prohibited
- C) Front windscreen wipers (both) must remain fitted and operable
- D) Windows must remain as per OEM fitment glass and both must remain fully operable
- E) Vehicle silhouette must remain as standard 1995-2000 BMW Z3 E36/7 specification with no additional modifications except for 2 x rear spoiler modification parts : CCR-Z3RSM-01 & CCR-Z3RST-01 and 1 x front splitter CCR-Z3FRSP-01
- F) Engine under trays other than the standard fitment type are prohibited

### 7.3 Ground Clearance

- A) Vehicle ground clearance at any point must be no lower than the minimum saloon car MOTORSPORT UK regulations as per section J 5.20.11 following the end of any official qualifying or race session.
- B) Ride height must be measured with the driver seated , tyres fully inflated and in full race trim including all fluids

### 7.4 Engine

#### 7.4.1 Permitted Modifications

- A) Engines may in the future need to be modified to receive a lock wire kit which would be installed by the Championship organisers
- B) To facilitate the removal of the standard heater box / matrix the vehicle may be fitted with the heater bypass kit
- C) The Carbon / Charcoal canister may be removed and bypassed
- D) Throttle body heater pipes may be removed and the system bypassed
- E) Engine mountings may be replaced with aftermarket alternatives
- F) Engines must not have their ECU control systems replaced but mapping is free
- G) Air conditioning system components may be removed in full if originally fitted
- H) Additional sensors to allow for additional dashboard / instrument functions are permitted
- I) Crankshaft journals may be machined for the purpose of re-grinding after a failure only with big end and main bearing journals allowed to be ground to facilitate fitment of oversize bearing shells in +0.25mm and +0.5mm sizes only

#### 7.4.2 Prohibited Modifications

- A) Engine balancing or machining beyond standard OEM specification is strictly prohibited
- B) Skimming of cylinder head and/or block for the purpose of increasing compression ratio (CR) is strictly prohibited. Any engines to be found running a CR outside of the tolerance specified within the BMW Technical specification must be fitted with a head gasket of an increased thickness with BMW part number 11121433951 with an uncompressed thickness of 2.04mm (+0.30mm oversize)



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- C) When replacing the cylinder head gasket of standard thickness type, the gasket must be replaced using the standard fitment BMW part number 11121433950 with an uncompressed thickness of 1.74mm
- D) Removal of material or polishing to match gaskets, modify inlet or exhaust ports, combustion chambers or any other component within the cylinder head is prohibited.
- E) Valve train components must be to OEM specification including but not limited to; springs, rockers lifters and retainers
- F) Camshaft timing must be as per OEM specification and all locking tools must fit correctly with the crank and cam shafts aligned as per BMW Technical specification.
- G) Camshafts must be OE BMW only and not aftermarket type.
- H) Inlet and Exhaust valves must be of Standard OEM specifications only and valves/seats must be cut as per BMW Technical specifications
- I) Pistons must be OEM Standard size 84.985 mm as per BMW Part Number 11251739786 for Z3 1.9 the connecting rods must be as per standard fitment of OEM type BMW Part Number 11241437617 Z3 1.9
- J) Modifications to the engine to alter OEM oil pressure are strictly prohibited, and the oil pump, pressure relief valve and all restricting holes/orifices are to remain standard in size and type.
- K) All Engine Sensors must remain as per standard and operate as the manufacturer intended, with the exception of the modifications permitted within these regulations.
- L) Crankcase ventilation system must remain as per OEM fitment.
- M) The engine and any of its components must not be modified in any way other than specified.
- N) The throttle body must operate as per OEM
- O) Any modifications other than those specifically allowed are viewed as prohibited and therefore illegal.
- P) Additional oil sump baffles or windage trays of any type are not permitted.
- Q) The standard fitted location of the engine must be retained and not modified in any way, although aftermarket engine mounts may be used.
- R) Engine mounting points must not be modified in any way.

### 7.4.3 Oil/Water Cooling

- A) A standard radiator cooling fan must be fitted and fully operational to OEM specifications
- B) The water cooling system must remain as per standard fitment with the exception of modifications allowed within 7.4.1
- C) The radiator must be as per OEM fitment design and be the same type as BMW Part Number 17111728907 or CCR-Z3FRAD-01
- D) Coolant hoses must remain as per standard construction, shape and material other than to bypass the heater and throttle body heaters as specified.
- E) An oil cooler for cooling engine oil temperatures is not permitted at this time.
- F) The engine water Thermostat must be of the same type as BMW Part Number 11531743017 and retain functionality at all times.

### 7.4.4 Induction Systems

Induction systems must remain fully as standard with the exception of:

- A) A propriety BMW Z3 1.9 air filter element must be fitted in its entirety as per manufacturers instructions but make is free.

### 7.4.5 Exhaust Systems

- A) The exhaust system must retain the standard right hand drive exhaust manifold and gasket arrangement.



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- B) The post-manifold exhaust system may be replaced with part CCR-Z3EXHT-01.
- C) No other exhaust system modifications are permitted other than specified.
- D) Exhaust must be in good condition and complete with no leaks.

### 7.4.6 Ignition Systems

- A) Ignition systems must remain standard fitment type with a OEM Specification ignition coil, OEM specification ignition leads and mandatory fitment spark plugs NGK BKR6EK

### 7.4.7 Fuel Delivery Systems

- A) Fuel systems must be as per originally fitted on the vehicle including fuel filter, vent systems, unless the fuel lines are to be ran through the vehicle interior.
- B) Fuel rail pressure must be 3.0 bar as per the standard vehicle within reasonable tolerance, and may be tested for compliance by a calibrated pressure tester by the Championship Organisers at any time during a Z&NGPBMW Racing event.
- C) Fuel pressure regulator must remain as per original fitment.

### 7.4.8 Engine Performance Testing / Engine Parity

- a) The Championship Organisers reserve the right to organise a group engine power test at a chosen venue, at any time using a chassis dynamometer. Vehicles must be transported directly to the power testing venue in a fully sealed specification in the same condition the vehicle finished the event, with no exceptions.
- b) Should performance testing be found to identify a difference in one or more competitors vehicles outside of a reasonable pre-determined tolerance when compared to other vehicles on the group test or as previously tested by The Championship Organisers, then the right is reserved to retain the vehicle for further assessment and potential engine and other components strip down to verify compliance with the regulations.
- c) The Championship Organisers may use a 'Compression Ratio Tester' operated in a controlled manner to determine if any competitor's engines require further scrutiny and investigation.
- d) The Championship Organisers reserve the right to publish results found by performance testing or component analysis.

## 7.5 SUSPENSION

### 7.5.1 Permitted Modifications

- A) Front Suspension Top Mounts may be replaced with optional fitment parts CCR-GAZ-Z3FTM1 or 2
- B) Rear Suspension Top Mounts may be replaced with optional fitment parts CCR-GAZ-Z3RTM
- C) Front and Rear suspension dampers must be replaced with Gaz units sealed for the Z&NGPBMW Z3 cars by the manufacturer (kit number GGA402D). Seals must be intact at all times.
- D) Front Suspension Main Spring – Spring rate and length is free.
- E) Rear Suspension Main Springs – Spring rate and length is free.
- F) Front Helper Springs and Rear Tender Springs are free
- G) Anti-Roll Bars must be the OEM type as fitted to NON M Sport specification BMW Z3 1.9 23mm Front ARB (BMW Part Number 31351091198)
- H) Anti-Roll Bar drop links are free
- I) Suspension Bushes are free.
- J) Suspension geometry is free within adjustment ranges provided by the regulations
- K) Front camber, castor and toe adjustments are achieved by use of the front suspension top



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- mounts and offset front lower wishbone rear mounting bush only.  
L) Rear camber and toe adjustments are achieved by the use of rear suspension eccentric bushes only.

### 7.5.2 Prohibited Modifications

- A) Suspension mounting points must remain as per OEM and must be unmodified.  
B) Suspension damper valving must remain as per originally supplied by GAZ  
C) Damper servicing must be carried out by GAZ Shocks to ensure all units are valved as supplied.  
D) Seals provided by GAZ Shocks must not be removed from suspension units. Any missing seals will render the vehicle ineligible for Z&NGPBMW Racing.  
E) Spring types, damper types and fitted locations must conform with section 7.5.1.  
F) Front Anti-roll bars must be fitted at all times and secured correctly. No loosening or removal of Front Anti Roll Bar is permitted. Rear Anti-roll bars may be removed.  
G) All suspension components must remain as per original fitment unless specified.

### 7.5.3 Wheelbase / Track

- A) Wheelbase must remain as per the standard vehicle (2459mm)  
B) Track width must remain as per the standard vehicle.

## 7.6 TRANSMISSIONS & DRIVE RATIO'S

### 7.6.1 Permitted Modifications

- A) A solid flywheel conversion kit is permitted but not mandated. Solid flywheel conversions must only be carried out using CCR-Z3SFW-01  
B) Clutch must either be as per original OEM fitment or aftermarket replacement for fitment to dual-mass flywheel unless the solid flywheel conversion kit is fitted, in which case the clutch must be part number CCR-Z3CK-01 as supplied with the solid flywheel kit.  
C) Gearshift lever knob is free.  
D) A gearbox breather is allowed.  
E) Clutch fluid pipes may be replaced by braided type only.  
F) Traction control systems may be removed entirely

### 7.6.2 Prohibited Modifications

- A) The standard gearbox must remain fitted and retain the original ratios as specified in 7.6.3.  
B) No modifications are permitted to the drivetrain in any way other than those above and must remain as per OEM installation.  
C) Gear linkage must remain as per standard fitment.

### 7.6.3 Gearbox Ratio's

- A) Z3 1.9 Standard gearbox ratio's must remain as per the original fitment 5 speed manual gearbox.

1st	=	4.23:1
2nd	=	2.52:1
3rd	=	1.66:1
4th	=	1.22:1
5th	=	1.00:1



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B) Final drive ratio must remain as original 3.45 with optional LSD kit CCZ3LSD.

### 7.7 ELECTRICS

The standard wiring loom must be used. The only modifications permitted are to remove redundant wiring in accordance with items allowed to be removed / disabled within these regulations.

#### 7.7.1 Exterior Lighting

Exterior lighting must at minimum operate dipped headlights, rear sidelights, full beam, indicators front and rear, rear rain light(s), brake lights.

#### 7.7.2 Rain Light

The rain light may be of an MOTORSPORT UK approved type securely mounted to the roll cage and clearly visible from the vehicle's rear with and without a hardtop roof, or the OEM rear fog lamps, suitably converted.

#### 7.7.3 Batteries

Batteries can be of any technology and placement as long as they conform with the MOTORSPORT UK safety & isolation regulations.

#### 7.7.4 Generators

A) Alternators must be fully functional as per the OEM fitment at all times and provide battery charge whilst the engine is running.

B) Alternator must be as per originally fitted type and no less than 80 AMP charge rate.

#### 7.7.5 Starter Motors / Starting Systems

A) Starter Motor must be as per OEM fitment part number 12412354709

B) Ignition and Start systems may be bypassed from standard key operation to use a switch panel

#### 7.7.6 Transponder (Official Timing)

A transponder must be fitted in accordance with the current MOTORSPORT UK yearbook

### 7.8 BRAKES

#### 7.8.1 Permitted Modifications

A) The vehicle handbrake may be removed in its entirety (including shoes, mechanism, cables and handbrake lever) or retained in a fully operational state actuating on both rear wheels to MOT Standard.

B) The brake disc backing plates may be removed from either or both axles.

C) The front brake discs cannot exceed 285mm diameter and be of steel construction but brand and model is free.

D) The front pad is free.

E) The rear brake discs must be of standard size and of steel construction but brand and model are free.

F) The rear pad is free.





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- G) Brake lines may be run through the vehicle interior subject to current MOTORSPORT UK yearbook regulations.
- H) Braided brake lines may be fitted to the brake calipers
- I) A Brake bias pressure reducing valve may be fitted to the rear brake line only and be lever operated.
- J) ABS system may be removed

### 7.8.2 Prohibited Modifications

- A) Brake Calipers, Master Cylinders and Brake Servo's must be as per OEM fitment unless specified.
- B) Any form of non OEM fitment brake ducting is prohibited.

### 7.9 WHEELS / STEERING

#### 7.9.1 Permitted Modifications / Options

- A) Permitted wheels are Team Dynamics Pro Race 1.2 7 x 15 ET20, 5x120, 72.6 bore.
- B) Wheel stud kits may be fitted to aid removal/fitting of the wheels.
- C) Steering wheels may be replaced with a steering wheel of a race type including addition of a steering wheel boss kit as per part number to facilitate fitment as per MOTORSPORT UK regulations.
- D) A snap off type steering wheel boss may be fitted.
- E) Steering wheel height may be adjusted by altering the steering column mount spacing. If an adjustable steering column is fitted, it must be secured permanently by modifying the column and fastened using a bolt and locking nut only.

#### 7.9.2 Prohibited Modifications

- A) Steering rack must be of OEM fitment type for a BMW Z3 as per BMW Part Number 32131095575.
- B) Steering column universal joint must be of OEM fitment type.

### 7.10 TYRES

#### 7.10.1 Tyre Specifications & Sourcing

Toyo Tires R888R GG Compound in 195/55/15 or 205/50/15 sizes are the only permitted tyre for any official practice, qualifying or race event.

Tyre are only to be sourced through the Nominated Tyre Supplier

Mike Stokes Motorsport  
01202 547555

Drivers should quote the Club (Project 8 Racing) and their race number to receive Club discounted pricing and for the Club to fulfil its sponsorship obligations.

#### 7.10.2 Tyre Usage

- A) Tyre buffing and shaving is strictly prohibited. The use of tyre heating / heat retention devices, tyre treatments and compounds is prohibited





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- B) The original tyre tread pattern must remain visible at all times on all tyres at the end of each official practice, qualifying or race session.

### 7.11 WEIGHT

The minimum weight of the vehicle, including driver and protective equipment / apparel at the end of the session / race is 1170kg's. There is no allowance for being under this weight. Competitors are advised to plan a margin of error to avoid exclusion from a session.

### 7.12 FUEL TANK / FUEL

#### 7.12.1 Fuel Tank Type & Location

Fuel tank type must be as per original OEM type and fitment including the original fuel pump. Fuel tank and pump must be in the original location without modification

#### 7.12.2 Fuel Type

Fuel must conform to MOTORSPORT UK definition of 'Pump Fuel' in the current MOTORSPORT UK yearbook. Octane boosters and fuel treatments are prohibited.

#### 7.12.3 Fuel Testing

- A) All vehicles must complete the race with a minimum of 3 litres of fuel to allow for post-event analysis of competitors fuel which may be sampled following the completion of any session.
- B) Fuel dry-break sampling valves may be fitted to the fuel feed pipe within the engine bay but are not mandated.

### 7.13 SILENCING

All vehicles must comply with current MOTORSPORT UK regulations for silencing

### 7.14 NUMBERS

Race Numbers must comply with MOTORSPORT UK Regulation Q11.4

### 7.15 DECALS

To be eligible to compete, it is mandatory to display the following decals.

These will include but are not limited to:

- i) MSVR, each front wing above indicator side repeater x2
- ii) P8R web address, rear quarter x 2
- iii) Toyo Tires, front screenstrip. Other than the numbers described in 5.17, no other text is permissible on the front screen.

A diagram showing placement of all required decals will be issued prior to the first event

7.15.1 Competition numbers will be obtained at the competitor's expense. One full set of championship decals will be supplied by Project 8 Racing. A charge may be made for replacement decals.

All Championship decals and Championship sponsors decals must be displayed in their entirety and in accordance with the diagram issued with decals.



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7.15.2 Drivers are required to display an MSVR badge on their overalls. If available, these will be supplied by MSVR. Please note that they must be stitched only through the outer layer of the garment using fire retardant thread to avoid any scrutineering issues.

7.15.3 Competition numbers must be carried in the same dimensions and colour as those for the front screen on the upper right corner of the rear screen.

7.15.4 Front and rear windows may be covered with championship or personal sponsor livery to a maximum depth of 250mm from the top of the window, measured from the centre line of the vehicle and must also comply with Q13.2.2. Where championship front or rear window championship decals are specified in 5.18.1, competitors may not additionally display personal sponsor decals in the position



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### 8. SPECIFIC TECHNICAL REGULATIONS FOR NEW GENERATION PBMW E90 325i

#### 8.1 CHASSIS

- A) The chassis must remain as per manufacturer specification in construction and material
- B) Reinforcing, removing or adding material to the chassis in any way other than to facilitate mounting of the seat or the fitting of the mandatory fitment roll cage is prohibited.
- C) Chassis must be fitted with a roll cage as per regulation 5.4.2 i)
- D) Removal of underbody and seam sealant for the purpose of chassis weight saving is strictly prohibited other than as required to facilitate mounting of seats and mandatory fitment roll cage.
- E) Chassis must not be seam welded for strengthening purposes
- F) No additional bracing, strut braces or other similar devices may be fitted

#### 8.2 INTERIOR / BODYWORK

Motorsport UK yearbook regulations J 5.2 & Q 13 also apply as relevant.

##### 8.2.1 Modifications Permitted

###### 8.2.1.1 Interior

- A) All interior sound proofing and insulation may be removed from the vehicle interior
- B) Steering locks must be removed/disabled if the vehicle is not road registered and driven to the circuit.
- C) Removal of all non-required items along with their sub-systems and corresponding wiring from the vehicle interior as listed below is permitted:

All interior trim (excluding dashboard, instrument cluster, and lateral dashboard support frame)  
Sunroof mechanisms can be removed entirely. Sunroof panel must be replaced with a steel sheet of at least the same material and thickness of the roof skin (see Motorsport UK regulation Q13.10.6)

Airbag system

Stereo system, speakers and aerial

Glove box

Centre Console

Electric mirror controls

Seat belts

Carpets

Standard seats

Headlight adjusters

Cruise control

Alarm system

Interior lighting

Standard door cards

Tool kit

Central locking system components

Redundant metal brackets for components no longer in use

- E) Fitment of a wide angle rear view mirror is mandated as per regulation 5.4.2 iii
- F) Fitment of an interior brake light is mandated as per regulation 5.4.2 ii



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- G) A roll cage must be fitted as per regulation 5.4.2 I
- H) A fire extinguisher system must be fitted as per regulation 5.4.2 iv
- I) Door cards must be fitted with a minimum thickness of 3mm and be of solid continuous material such as ABS plastic or aluminium, and door latches must remain fully operational from within the vehicle interior.
- J) An FIA approved racing seat must be fitted as per 5.4.1 I
- K) A shift light kit may be fitted
- L) An auxiliary gauge kit may be fitted to the vehicle interior

### 8.2.1.2 Exterior

- A) All exterior and under body soundproofing, heat shielding and insulation may be removed, with reference to section 8.1
- B) Removal of non required items along with their sub-systems and corresponding wiring from the vehicle exterior as listed below is permitted :

Front fog lights or front fog light blanking plates  
Horn  
Number plate mounting plastics & number plates  
Number plate mounts and trim  
Inner wheel arch liners  
Standard vehicle under trays  
Headlamp wash/wipe  
Sunroof panel – see 8.2.1.1. C

- C) Fitment of replacement body panels as long as they are to standard OEM specification is permitted
- D) Only E90 325i 4 door saloon model silhouette is permitted.
- E) DVLA registration plates must be removed when vehicles are on circuit
- F) Fog light blanking plates may be used
- G) Mounting of towing straps to the vehicle structure using a minimum of M12 bolts is mandated as required by the current MOTORSPORT UK yearbook.
- H) Extinguisher and battery isolator push buttons / pull cables must be fitted to the vehicle as per the current MOTORSPORT UK yearbook.
- I) Standard bonnet catch mechanisms can be removed completely to be replaced with suitable aftermarket fasteners
- J) Bonnet and boot opening struts may be removed but is not mandated
- K) A boot spoiler may be fitted to the rearmost edge of the boot lid. The spoiler must be of the same design and dimensions as BMW part No 51710411575.
- L) Only standard and M Sport bumpers, side skirts are permitted as per BMW part numbers : 51117204242, 51117906491, 51127141053, 51127906501, 51777164795, 51777164796, 51778041142, 51778041141.

### 8.2.2 Modifications Prohibited

#### 8.2.2.1 General

- A) Modifications to the vehicle beyond those permitted within section 8.2.1 are strictly prohibited
- B) Taping or smoothing of joints between panels is prohibited, other than to help secure a body part temporarily after an incident during the event.

#### 8.2.2.2 Interior



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- A) Electric windows must remain fitted and be operable by the driver whilst seated and strapped in
- B) Removal of seam sealer within the passenger compartment is prohibited other than as required to facilitate fitment of the roll cage and seat mountings as per 8.1
- C) Vehicle interiors must be in good condition with no sharp edges and fit for purpose

### 8.2.2.3 Exterior

- A) Removal of vehicle underbody sealant is strictly prohibited except for localised areas to facilitate fitment of a seat mount or roll cage as per 8.1
- B) Removal of the front and rear bumper crash bars/supports are strictly prohibited
- C) Front windscreen wipers (both) must remain fitted and operable
- D) Windows must remain as per OEM fitment glass and both must remain fully operable
- F) Plan view of the car must be as OEM with no extensions to wheel arches permitted
- G) The use of any under trays, diffusers, or any other aerodynamic device fitted to the underside of the vehicle other than those fitted as standard are prohibited unless expressly allowed in these regulations.

### 8.3 Ground Clearance

- A) Vehicle ground clearance at any point must be no lower than the minimum saloon car MOTORSPORT UK regulations as per section J 5.20.11 following the end of any official qualifying or race session.
- B) Ride height must be measured with the driver seated, tyres fully inflated and in full race trim including all fluids

### 8.4 Engine

The BMW E90 325i N52B25 with a standard engine except for modifications explicitly allowed is the only permitted vehicle/engine allowed for New Generation PBMW cars.

#### 8.4.1 Permitted Modifications

- A) Engines may in the future need to be modified to receive a lock wire kit which would be installed by the Championship organisers
- B) Engines must not have their ECU control systems replaced or relocated. The Championship Control Map supplied by Hybrid Tune is mandated.
- C) Air conditioning system components may be removed in full if originally fitted
- D) Additional sensors to allow for additional dashboard / instrument functions are permitted
- E) The intake manifold must be replaced with the OEM part 11617522927 / 11617559523 from the N52B30.
- F) The plastic engine cover may be removed. The housing for the microfilter may be removed.
- G) An alternative air filter is permitted in the original air intake position.

#### 8.4.2 Prohibited Modifications

- A) Engine balancing or machining beyond standard OEM specification is strictly prohibited
- B) Skimming of cylinder head and/or block for the purpose of increasing compression ratio (CR) is strictly prohibited.
- C) When replacing the cylinder head gasket of standard thickness type, the gasket must be replaced using the standard fitment BMW part.
- D) Removal of material or polishing to match gaskets, modify inlet or exhaust ports, combustion chambers or any other component within the cylinder head is prohibited.



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- E) Valve train components must be to OEM specification including but not limited to; springs, rockers lifters, retainers and VANOS system.
- F) Camshaft timing must be as per OEM specification and all locking tools must fit correctly with the crank and cam shafts aligned as per BMW Technical specification.
- G) Camshafts must be OE BMW only and not aftermarket type.
- H) Inlet and Exhaust valves must be of Standard OEM specifications only and valves/seats must be cut as per BMW Technical specifications
- I) Pistons must be OEM Standard size
- J) Modifications to the engine to alter OEM oil pressure are strictly prohibited, and the oil pump, pressure relief valve and all restricting holes/orifices are to remain standard in size and type.
- K) All Engine Sensors must remain as per standard and operate as the manufacturer intended, with the exception of the modifications permitted within these regulations.
- L) Crankcase ventilation system must remain as per OEM fitment.
- M) The engine and any of its components must not be modified in any way other than specified.
- N) The throttle body must operate as per OEM
- O) Any modifications other than those specifically allowed are viewed as prohibited and therefore illegal.
- P) Additional oil sump baffles or windage trays of any type are not permitted.
- Q) The standard fitted location of the engine must be retained and not modified in any way.
- R) Engine mounting points must not be modified in any way. OEM engine mounts are mandated.

### 8.4.3 Oil/Water Cooling

- A) A standard radiator cooling fan must be fitted and fully operational to OEM specifications
- B) The water cooling system must remain as per standard fitment with the exception of modifications allowed within 8.4.1
- C) The radiator must be as per OEM
- D) Coolant hoses must remain as per standard construction, shape and material.

### 8.4.4 Induction Systems

Induction systems must remain fully as standard with the exception of 8.4.1 E & 8.4.1 G

### 8.4.5 Exhaust Systems

- A) The exhaust system must remain as standard including manifolds, gaskets, catalytic converters and centre box. The rear (back) box may be removed and replaced with steel pipe of the same diameter as OEM pipework exiting the centre box.
- B) The exhaust system must exit the underside of the vehicle in its standard position
- C) No other exhaust system modifications are permitted other than specified.
- D) Exhaust must be in good condition and complete with no leaks.
- E) Heat resistant wrapping or coatings are not permitted of any type.

### 8.4.6 Ignition Systems

- A) Ignition systems must remain standard fitment type with a OEM Specification Coil-on-Plug ignition coils.

### 8.4.7 Fuel Delivery Systems



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- A) Fuel systems must be as per originally fitted on the vehicle including fuel filter, vent systems.
- B) Fuel rail pressure must be as per the standard vehicle within reasonable tolerance, and may be tested for compliance by a calibrated pressure tester by the Championship Organisers at any time during a Z&NGPBMW Racing event.
- C) Fuel pressure regulator must remain as per original fitment.

### 8.4.7 Engine Performance Testing / Engine Parity

- a) The Championship Organisers reserve the right to organise a group engine power test at a chosen venue, at any time using a chassis dynamometer. Vehicles must be transported directly to the power testing venue in a fully sealed specification in the same condition the vehicle finished the event, with no exceptions.
- b) Should performance testing be found to identify a difference in one or more competitors vehicles outside of a reasonable pre-determined tolerance when compared to other vehicles on the group test or as previously tested by The Championship Organisers, then the right is reserved to retain the vehicle for further assessment and potential engine and other components strip down to verify compliance with the regulations.
- c) The Championship Organisers may use a 'Compression Ratio Tester' operated in a controlled manner to determine if any competitor's engines require further scrutiny and investigation.
- d) The Championship Organisers reserve the right to publish results found by performance testing or component analysis.

### 8.5 SUSPENSION

As per Motorsport UK regulations J 5.5 and the following :

#### 8.5.1 Permitted (including mandated) Modifications

- A) Factory sealed Gaz Gold NGPBMW Championship shock absorbers are mandated.
- B) Adjustable front top mounts are allowed.
- C) Front Suspension spring rate and length is free
- D) Rear Suspension spring rate and length is free
- E) Anti-Roll Bars must be the OEM type as fitted to E90 325i with a maximum diameter of 26.5mm(front) and 14mm (rear)
- F) Suspension Bushes are free subject to restrictions in 8.5
- G) Front camber, castor and toe adjustments are achieved by use of the front suspension top mounts and offset front lower wishbone rear mounting bush only.

#### 8.5.2 Prohibited Modifications

- A) Suspension mounting points must remain as per OEM and must be unmodified unless explicitly allowed.
- B) Suspension damper valving must remain as per originally supplied by GAZ
- C) Damper servicing must be carried out by GAZ Shocks to ensure all units are valved as supplied.
- D) Seals provided by GAZ Shocks must not be removed from suspension units. Any missing seals will render the vehicle ineligible for Z&NGPBMW Racing.
- E) Suspension links and arms are to remain OEM. No modification of standard suspension arms is allowable including non-standard geometry. This includes but is by no means limited to welding, hydraulic manipulators and / or machining.
- F) Front Anti-roll bars must be fitted at all times and secured correctly. No loosening or removal of Front Anti Roll Bar is permitted. Rear Anti-roll bars may be removed.
- G) All suspension components must remain as per original fitment unless specified.





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### 8.5.3 Wheelbase / Track

- A) Wheelbase must remain as per the standard vehicle
- B) Wheel spacers are not permitted beyond the allowances in 8.9.1.E
- C) Front & rear track must remain as standard OEM with allowance to 8.9

### 8.6 TRANSMISSIONS & DRIVE RATIO'S

#### 8.6.1 Permitted Modifications

- A) Rear differential unit may be replaced with a 3.73 open differential from an E90 325i automatic.
- B) Clutch delay valve may be removed or adapted (bored to 4mm).
- C) Gearshift lever knob is free.
- D) Differential carrier mounting bushes may be replaced with alternative bushes / bushing material.

#### 8.6.2 Prohibited Modifications

- A) The standard gearbox must remain fitted and retain the original ratios as specified in 8.6.3.
- B) No modifications are permitted to the drivetrain in any way other than those above and must remain as per OEM installation.
- C) Gear linkage must remain as per standard fitment.
- D) All clutch parts, mechanism and flywheel must remain OEM with the exception of 8.6.1 B

#### 8.6.3 Gearbox Ratio's

- A) E90 325i Standard gearbox ratio's must remain as per the original fitment 6 speed manual gearbox. A working reverse gear must be operational.

1st	=	4.32:1
2nd	=	2.46:1
3rd	=	1.66:1
4th	=	1.23:1
5th	=	1.00:1
6th	=	0.85:1

### 8.7 ELECTRICS

The standard wiring loom must be used. The only modifications permitted are to remove redundant wiring in accordance with items allowed to be removed / disabled within these regulations.

#### 8.7.1 Exterior Lighting

Exterior lighting must at minimum operate dipped headlights, rear sidelights, full beam, indicators front and rear, rear rain light(s), brake lights.

#### 8.7.2 Rain Light





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— The rain light may be of an MOTORSPORT UK approved type securely mounted to the roll-cage and clearly visible from the vehicle's rear with and without a hardtop roof, or the OEM rear fog lamps, suitably converted.

### 8.7.3 Batteries

— Batteries can be of any technology and placement as long as they conform with the MOTORSPORT UK safety & isolation regulations.

### 8.7.4 Generators

A) — Alternators must be fully functional as per the OEM fitment at all times and provide battery charge whilst the engine is running.

B) — Alternator must be as per originally fitted type and no less than 80 AMP charge rate.

### 8.7.5 Starter Motors / Starting Systems

A) — Starter Motor must be as per OEM fitment

B) — Ignition and Start system must be as per OEM (key & start button included)

### 8.7.6 Transponder (Official Timing)

— A transponder must be fitted in accordance with the current MOTORSPORT UK yearbook

## 8.8 BRAKES

### 8.8.1 Permitted Modifications

A) — The brake disc backing plates may be removed from either or both axles.

B) — The front and rear brake discs must be as per OEM dimensions but aftermarket steel discs are allowed.

C) — The front pad is free.

D) — The rear pad is free.

E) — Braided brake lines may be fitted to the brake calipers

F) — A flexible air tube with maximum 100mm diameter for front brake cooling is permitted at each front wheel. Air tubes must be placed in existing front bumper or fog light openings.

— Air tubes must not extend beyond the plan views of the body contours.

### 8.8.2 Prohibited Modifications

A) — ABS or traction control system removal or modification.

B) — Any form of brake bias modification.

C) — Brake Calipers, Master Cylinders and Brake Servo's must be as per OEM fitment unless specified.

D) — The handbrake must remain operational on both rear wheels.

## 8.9 WHEELS / STEERING

— As per Motorsport UK regulations J 5.7 and the following:

### 8.9.1 Permitted Modifications / Options

A) — Road wheels must be single piece aluminium alloy 8 x 17 ET35 to ET15



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- B) Wheel hubs may be fitted with studs to accept wheel nuts.
- C) Steering wheels may be replaced with a steering wheel of a race type including addition of a steering wheel boss kit as per part number to facilitate fitment as per MOTORSPORT UK regulations.
- D) A snap off type steering wheel boss may be fitted.
- E) Wheel spacers of 5mm per hub are permitted to achieve a maximum offset of ET15

### 8.9.2 Prohibited Modifications

- A) Power steering must not be disabled.
- B) The steering system must remain as original except a 6pk1100 PAS belt is required if the air conditioning system is removed.

### 8.10 TYRES

#### 8.10.1 Tyre Specifications & Sourcing

Toyo Tires R888R GG Compound in 225/45/17 size are the only permitted tyre for any official practice, qualifying or race event.

Tyre are only to be sourced through the Nominated Tyre Supplier

Mike Stokes Motorsport  
01202 547555

Drivers should quote the Club (Project 8 Racing) and their race number to receive Club discounted pricing and for the Club to fulfil its sponsorship obligations.

#### 8.10.2 Tyre Usage

- A) Tyre buffing and shaving is strictly prohibited. The use of tyre heating / heat retention devices, tyre treatments and compounds is prohibited
- B) The original tyre tread pattern must remain visible at all times on all tyres at the end of each official practice, qualifying or race session.

### 8.11 WEIGHT

The minimum weight of the vehicle, including driver and protective equipment / apparel at the end of the session / race is 1350kg. There is no allowance for being under this weight. Competitors are advised to plan a margin of error to avoid exclusion from a session.

### 8.12 FUEL TANK / FUEL

#### 8.12.1 Fuel Tank Type & Location

Fuel tank type must be as per original OEM type and fitment including the original fuel pump. Fuel tank and pump must be in the original location without modification

#### 8.12.2 Fuel Type

Fuel must conform to MOTORSPORT UK definition of 'Pump Fuel' in the current MOTORSPORT UK yearbook. Octane boosters and fuel treatments are prohibited.

#### 8.12.3 Fuel Testing



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- A) All vehicles must complete the race with a minimum of 3 litres of fuel to allow for post-event analysis of competitors fuel which may be sampled following the completion of any session.
- B) Fuel dry break sampling valves may be fitted to the fuel feed pipe within the engine bay but are not mandated.

### 8.13 SILENCING

All vehicles must comply with current MOTORSPORT UK regulations for silencing

### 8.14 NUMBERS

Race Numbers must comply with MOTORSPORT UK Regulation Q11.4

### 8.15 DECALS

To be eligible to compete, it is mandatory to display the following decals.

These will include but are not limited to:

- i) MSVR, each front wing above indicator side repeater x2
- ii) P8R web address, rear quarter x 2
- iii) Toyo Tires, front screenstrip. Other than the numbers described in 5.17, no other text is permissible on the front screen.

A diagram showing placement of all required decals will be issued prior to the first event

8.15.1 Competition numbers will be obtained at the competitor's expense. One full set of championship decals will be supplied by Project 8 Racing. A charge may be made for replacement decals.

All Championship decals and Championship sponsors decals must be displayed in their entirety and in accordance with the diagram issued with decals.

8.15.2 Drivers are required to display an MSVR badge on their overalls. If available, these will be supplied by MSVR. Please note that they must be stitched only through the outer layer of the garment using fire retardant thread to avoid any scrutineering issues.

8.15.3 Competition numbers must be carried in the same dimensions and colour as those for the front screen on the upper right corner of the rear screen.

8.15.4 Front and rear windows may be covered with championship or personal sponsor livery to a maximum depth of 250mm from the top of the window, measured from the centre line of the vehicle and must also comply with Q13.2.2. Where championship front or rear window championship decals are specified in 5.18.1, competitors may not additionally display personal sponsor decals in the position



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### 7. Nominal / Preferred Parts Suppliers

Where parts are nominated, they must be purchased from the specified parts suppliers.

Gaz Shocks (Gazzmatic International Limited)  
[www.gazshocks.com](http://www.gazshocks.com)

Toyo Tires

Tires must be purchased through ~~Mike Stokes Motorsport~~ the tyre dealer shown at [www.p8r.co.uk](http://www.p8r.co.uk)  
quoting your race number and 'Project 8 Racing Club'  
[www.mikestokes.co.uk](http://www.mikestokes.co.uk)

Hybrid Tune (ECU Map for ~~E90 325i~~)  
ECU to be used must be sent to hybrid tune for specific mapping to your vehicle.  
[www.hybridtune.co.uk](http://www.hybridtune.co.uk)

Coupes & Convertibles

Any item part numbers starting with 'CCR' should may be sourced through Coupe's & Convertibles  
[www.coupesandconvertibles.co.uk](http://www.coupesandconvertibles.co.uk)