



2019 – SCOTTISH BMW COMPACT CUP SPORTING & TECHNICAL REGULATIONS

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1. SPORTING REGULATIONS - GENERAL

1.1 TITLE & JURISDICTION:

The Scottish BMW Compact Cup is organised and administered by the Knockhill Motor Sports Club (KMSC) in accordance with Motorsport UK General Regulations (incorporating the provisions of the International Sporting Code of the FIA) and these Series Regulations.

Motorsport UK Series Registration No. RS2019/xxx

Race Status: Clubmans

1.2 OFFICIALS:

1.2.1 Co-ordinator: Greg Graham
Tel. 07920 096697

E-mail. scottishbmw@gmail.com

1.2.2 Eligibility Scrutineer: Gordon E Hay

Tel. 07740 243100 before 9.30pm. E-mail. gordonehay@hotmail.co.uk

1.3 COMPETITOR ELIGIBILITY:

1.3.1 Entrants must be fully paid up valid membership card holding members of the Knockhill Motor Sports Club and be in possession of a valid current Motorsport UK Entrants Licences, where applicable.

1.3.2 Drivers and Entrant/Drivers must:

(a) be current fully paid up valid membership card holding members of the Knockhill Motor Sports Club, and

(b) be Registered for the Series, and

(c) be in possession of valid current Competition Race National 'B' Status Licence, as a minimum.

(d) 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).

(e) If participation in the Series requires absence from education a driver, in full time school education is required to have the approval of their head teacher and a letter stating such approval from their school in order to fulfil registration for the Series. A driver shall not take time out of their education to participate in motor sport without the prior written approval of their education establishment.

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

1.4 REGISTRATION:

1.4.1 All drivers must register as competitors for the Series with Knockhill Motor Sports Club prior to the Final Closing Date for the first round being entered and joining the Knockhill Motor Sports Club (£30 annual membership fee).

1.4.2 The registration fee for the Series is £200.

1.4.3 Registration numbers will be the permanent Competition numbers for the Series.

1.4.4 Acceptance or rejection of registration is entirely at the discretion of the organisers and promoters.

1.5 SERIES ROUNDS:

The Series will be contested at 7 events as follows;

Date:	Venue:	Organising Club:	Grade:
Sun. 21 st April 2019	Knockhill Clockwise	Knockhill Motor Sports Club	Clubmans
Sat. 15 th June 2019	Knockhill Anti-Clockwise	Knockhill Motor Sports Club	Clubmans
Sun. 16 th June 2019	Knockhill Clockwise	Knockhill Motor Sports Club	Clubmans
Sat. 3 rd August 2019	Knockhill Anti-Clockwise	Knockhill Motor Sports Club	Clubmans
Sun. 4 th August 2019	Knockhill Clockwise	Knockhill Motor Sports Club	Clubmans
Sat. 7 th Sept. 2019	Knockhill Anti-Clockwise	Knockhill Motor Sports Club	Clubmans
Sun. 8 th Sept. 2019	Knockhill Clockwise	Knockhill Motor Sports Club	Clubmans

Each event consists of Qualifying plus two Races.

1.6 SCORING:

1.6.1 This is a series of individual races with no accumulative scoring or awards.

1.7 AWARDS:

1.7.1 All awards are to be provided by the Knockhill Motor Sports Club.

1.7.2 PER ROUND
Trophies to 1st, 2nd & 3rd overall.

1.7.3 Bonuses: The organisers/sponsors/promoters reserve the right to provide additional awards for and during the Series.

2. SERIES EVENT MEETINGS AND RACE PROCEDURES

2.1 ENTRIES

2.1.1 Competitors are responsible for sending in correct and complete entries with the correct entry fee prior to the closing date for entries before each event.

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 Meeting Organiser 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 Meeting Organisers in writing. D25.1.12. applies.

2.1.4 The Entry Fee for each event shall be specified in the SRs and on the entry form.

2.1.5 Reserves will be listed in the Final List of Entries published with Final Instructions or in a Bulletin.

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 General Regulation Q4.5) for a grid position based on practice times.
- 2.3.3 The results from Race 1 determine the grid for Race 2. Non-finishers start at the back of the grid in reverse order of retirement with non-starters from Race 1 starting behind them.

2.4 RACES:

Should any race be disrupted the Clerk of the Course shall not be obliged to resume or rerun the race (Motorsport UK General Regulation Q.5.4.)

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:-
 - I. 1 minute to start - Start Engines/Clear Grid.
 - II. 30 Seconds - Visible and audible warning for start.
 - III. A five second board will be used to indicate that the grid is complete.
 - IV. The red lights will be switched on five seconds after the board is withdrawn.
- 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 driver unable to start the Green Flag lap or start are required to indicate their situation as per Motorsport UK Regulation Q.12.13.2. In addition any driver unable to maintain grid positions on the Green Flag Lap, to the extent that ALL other cars are ahead of them, may complete the Green Flag lap but MUST remain at the rear of the last row of the grid but ahead of any cars to be started with a time delay.
- 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 60kph

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

At all times throughout the event, competing vehicles shall be fitted with a working timing identification module (i.e. transponder) in accordance with Motorsport UK General Regulation Q.12.2.1 The nationally required transponder is a MyLaps X2 Car transponder.

2.11 QUALIFICATION RACES

If any event is oversubscribed the Organising Club may at their discretion run Qualification Races or separate races to accommodate all entries.

2.12 OPERATION OF SAFETY CAR

- 2.12.1 The Safety Car will be brought into operation and run in accordance with Section Q, Appendix 2 of the Motorsport UK General Regulations, but subject to the following variations;
- 2.12.2 At Knockhill, the Safety Car will be located in the Tri-Oval and it will normally join and exit the circuit immediately after The Hairpin. If this location is to be varied at Knockhill, specific written instructions and verbal briefings will be issued detailing the exact location to be used.
- 2.12.3 At Knockhill, the Safety Car will not join the circuit until a Safety Car board and a waved yellow flag have been displayed at the Hairpin-In flag point.

2.12.4 The first three laps completed during the Safety Car intervention will be added to the race distance. Example, a 10 lap race with 3 Safety Car laps will become an 13 lap race. Any Safety Car laps above 3 laps will count as race laps.

2.13 ONBOARD CAMERAS

For the full duration of all qualifying sessions and races all competitors' race cars are required to carry a fully operational 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, or which is reported to the Series Co-ordinator for investigation. The decision to review any such video footage is at the discretion of the Clerk of the Course, Stewards of the Meeting or the Series Co-ordinator.

- 1) It is the competitor's sole responsibility to ensure safe installation and effective operation of the camera equipment. At all times cameras must be fitted in accordance with Motorsport UK Regulations and be approved by the Chief Scrutineer in accordance with Motorsport UK General Regulation J.5.21
- 2) Cameras must be mounted in a central to left position with the steering wheel and front screen in clear view.
- 3) In the event that no data is available on request sanctions may be applied which can include but are not limited to disqualification from the Series or a fine of up to £500.

3. SPECIFIC SERIES REGULATIONS

None

4. SPECIFIC SERIES PENALTIES

In accordance with Section C of the current Motorsport UK Yearbook.

4.1 DRIVING STANDARDS

In the event of a Registered Competitor's driving standards or conduct falling below the standards considered to be appropriate to the Series, the Series Co-ordinator, and/or Clerk of the Course will consider any incident or occurrence. As a result of their consideration if (a) a breach of driving standards and/or (b) behaviour either on or off the track such as to bring the Club or the Series into disrepute and/or (c) any other breach of these Regulations, the Clerk of the Course may take any action as prescribed in the Motorsport UK Regulations. In addition to any such action, the Series Co-ordinator may issue a Series 'White, Yellow or Red Card' as detailed below;

ON-TRACK:

Depending on the severity of the incident and/or the consequences of it as judged by the relevant official, a white, yellow or red card may be issued.

- **PENALTY: WHITE CARD (Warning)** – Two white cards issued to the same competitor in the Series season will result in a yellow card to be issued.
- **PENALTY: YELLOW CARD** resulting in the suspension of membership to the KMSC for a period commencing 30 minutes before the start of the next Scottish BMW Compact Cup race and ending 30 minutes after the next Scottish BMW Compact Cup race finishes.
- Two yellow cards issued to the same competitor in the Series season will result in a red card being issued.
- **PENALTY: RED CARD** resulting in the immediate suspension of membership to the KMSC for a period ending 30 minutes after the end of the second of the next two Scottish BMW Compact Cup races.
- Two red cards issued to the same competitor in the Series season will result in the immediate suspension of membership to the KMSC for the remainder of the applicable season.
- Whether having direct involvement in any incident or not, any driver who cannot / will not provide their in car video evidence will, at the discretion of the Series Co-ordinator be issued a white card.

OFF-TRACK:

- Refusal to co-operate with the Series Co-ordinator during the investigation of incident:

PENALTY: RED CARD

- Any form of abusive or aggressive conduct will result in termination of KMSC membership.

5. TECHNICAL REGULATIONS

5.1 Introduction

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 what modifications or upgrades can be made to the car, then the principle is that chosen alternatives will not be permitted. The fact that some modifications are mentioned as prohibited does not imply that others are allowed. If any doubt exists about the legality or acceptability of any modifications then please request clarification from the Eligibility Scrutineer **prior** to any work being undertaken.

5.1.2 **STANDARD:** The phrase 'standard part' used within these technical regulations as a description of components is to be interpreted as per 'Standard Part'. Checking will be by comparison to the BMW Racedays Compact Cup Technical File, or by any other means necessary to ensure compliance. **Motorsport UK definition (Section B – Nomenclature and definitions). Standard Part:** "Is a part, the specification, features; location and method of operation of a part are as supplied when new by the motor manufacturer for the model and date of car as shown on the entry form."

5.1.3 **STANDARD PATTERN:** The phrase 'standard pattern' used within these technical regulations, as a description of components is to be interpreted as per 'Standard Pattern Part'. Checking will be by any means necessary to ensure compliance.

MSA definition (Section B – Nomenclature and Definitions) Standard Pattern Part "A replacement part that has a similar form shape and features as the standard part and is made using similar materials and manufacturing processes e.g. A standard part manufactured by a non-original equipment supplier that is fully interchangeable with the standard part."

5.2 General Description

The Scottish BMW Compact Cup Series is for competitors participating in the BMW E36 Compact 318 Ti M44 UK & European domestic market cars in either left or right hand drive versions. There are no restrictions on the transportation of cars to and from the circuit. Cars will run in one class.

5.2.1 Examination of Vehicles

The Eligibility Scrutineer (in addition to any other powers held under these Regulations) reserves the right before or after any qualifying session or race in the Series to designate any one or more of the competing cars for special eligibility scrutineering. Competitors must be prepared, with tools and spare parts as necessary, to enable inspection of components, or to have units sealed at the circuit for later inspection by an Eligibility Scrutineer at the competitor's expense.

Upon such election being made the competitor shall immediately place the car under the control of the Series Co-ordinator and be deemed to have permitted all such scrutineering, examination and testing as the organisers may responsibly require to undertake. The Eligibility Scrutineer and any person appointed by him has the right to:

- a) Examine the car at the circuit for such period as they may reasonably require and take fuel and/or other samples
- b) Retain the car for detailed examination at premises chosen by the Series Co-ordinator. If the Eligibility Scrutineer elects to retain the car they shall make it available for collection by the competitor at least seven days prior to the qualification session for the next race in the Series unless the car is found to be in breach of these regulations

- c) Seal the car and any of its components in any such manner as chosen and require the competitor at their own expense to present the car at any other premises chosen by the organisers for detailed examination within any agreed period and/or remove the car by transporter at no expense to the competitor to an appointed location. The competitor will be notified of the time, date and location of the subsequent testing or eligibility examination.
- d) The overseen stripping of the engine or any required component will be undertaken by the competitor and/or mechanic/technician nominated by the competitor.
- e) The scrutineer can at their discretion request the removal of any part for their further inspection and testing. If the scrutineer decides to retain any part for further inspection over a race weekend, a fully eligible replacement part will be provided by the scrutineer at the time of removal, allowing the competitor to continue racing.

5.2.2 For the purposes of post season scrutineering, at any time the Eligibility Scrutineer may seal any car and any of its components in any manner he/she chooses, and require that the competitor at their own expense present the car at any other premises chosen by the organisers for detailed post season examination. The competitor will be notified of the time, date and location chosen for this examination.

5.3 Safety Requirements

5.3.1. The following Articles of Motorsport UK Section K Safety Criteria Regulations will apply: K drawings 1-6 with compulsory 'side-entry' bar on both the driver and passenger side of the car; K5, K6, K8 - K11, K13 - K14. Extinguishers must be plumbed-in and comply with Motorsport UK regulation K 3.1.2 a). Seat belts must be FIA homologated as per K2.1.2, K2.1.3 or K2.1.4.

5.4 General Technical Requirements and Exceptions

All cars must comply with the requirements of sections J and Q19 of the current Motorsport UK Yearbook. All vehicles must be of sound construction and mechanical condition and be well maintained. There is no requirement for an MOT Certificate, Road Tax or Insurance.

The Series Co-ordinator in conjunction with the Organisers, reserves the right to refuse or cancel the entry of any car of which in their opinion the preparation is not to a standard expected by the Series, (including the external appearance) and/or which may be considered to bring the Series into disrepute. Any car which has suffered panel damage at a previous race meeting may be inspected by the Series Co-ordinator or their representatives at the subsequent race meeting to ensure that the external appearance is to a standard expected by the Series.

5.5 Chassis

No chassis modification or stiffening is permitted except that derived from the fitting of the roll cage; the cage must be a bolt in multi-point Safety Devices B034. Cars fitted with alternative cages must have been registered for and raced in a UK Compact Cup Series previously (the Series Co-ordinator is able to clarify this position for individual race cars). Extensions of the cage into the engine bay are prohibited. Seam welding or the addition of spot welds to the shell is prohibited. Bolt-on aftermarket front & rear strut braces are permitted.

All race cars must be equipped with two front and two rear towing eyes positioned equally either side of the longitudinal centre line. They must be clearly visible, marked with an arrow and the word "tow" and be clearly identifiable by means of a brightly coloured coating and pull cord or tab.

The towing eyes must be made of at least 6mm diameter steel wire rope with a 6x19 wire core, each which must have a breaking-strain of at least 2 tons. Each towing eye must allow the passage of a cylinder with a diameter of 60 mm, situated 25mm forward of the adjacent bodywork - 100 mm above and below this hole must retain clearance to enable the recovery crews to attach straps and shackles. The towing eye must be fixed to a structural part of the chassis with a minimum of M12 fixings, the inner part must be flexible in order for the towing eye to be retracted inside the bodywork profile. A "pull-cord" must be attached to the towing eye to enable the marshals to access the wire loop. The end attached to the chassis may be either 'thimble' or 'open-loop' style. Each complete towing eye must be certified as meeting this load requirement.

5.6 Bodywork

5.6.1 Modifications Permitted:

5.6.1.1 General:

Mandatory fitment of laminated windscreen. All other windows (not sunroof) to remain standard material. The addition of colourless safety film to the glass is permitted.

5.6.1.2 Interior:

Driver's seat must be replaced with a competition seat fitted in accordance with K2.2. All passenger seats, floor coverings, roof lining, sound deadening materials, radio/stereo units, speakers and associated wiring may be removed. Redundant interior metal bracketry such as rear seat mountings may be removed, however competitors should bear in mind that if the removal of any material results in weakening the structural integrity of any panel, then the scrutineer, or Clerk of the Course (at their own discretion) will be fully authorised to prohibit the vehicle from competing.

Spare wheel & associated parts, and all tools must be removed. Additional instruments are permitted, but the original dash binnacle and instrument cluster, must be retained and fitted in their original positions.

The main body of the standard dashboard must be retained and securely fitted in its original position, however localised trimming is permitted to allow roll cage fitment and the addition of aftermarket switchgear or pull cables. The removal of the glove box, lid and hinges is permitted.

Steering wheel may be changed (compulsory if an air bag is fitted as original equipment). A glass sunroof must be removed or replaced as per Motorsport UK regulation Q19.14.6.

Electric window winding mechanisms must be retained, and the driver's window must be fully operational.

It is permitted to remove air-conditioning if fitted, but the original heater matrix, mechanism and blower must be fitted and operational. The removal of dashboard air vents and associated pipe work is permitted, however the heating system must be able to demonstrate the ability to blow hot air onto the front windscreen to aid demisting. An interior (standard or non standard) rear view mirror must be fitted to the left of the driver (or right if the car is left hand drive). If original interior door panels are removed they must be replaced with strong sheeting - this must be executed to a high standard with no sharp edges and with smooth surface.

5.6.1.3 **Exterior:**

Door mirrors must be fitted on both sides of the vehicle and may be any production or pattern BMW E36 or E36 M3 part; the choice of mirror within them is free.

The original number of front windscreen wiper arms/blades must remain and be fully functioning. The rear motor and all wiring may be removed from tailgate. Front windscreen washer systems must be fully operational.

All weather strips/channels must be retained.

The standard engine bay cover locking mechanism must be disabled; only bonnet pins may be used to secure the engine bay cover in the closed position.

Door bars may be removed and some localized trimming of the inner door skins, tailgate and bonnet for lightening purposes is permitted.

Removal of impact absorbing materials from the internals of front and rear bumpers is permitted.

Competitors should bear in mind that if the removal of any material results in weakening the structural integrity of any panel, then the scrutineer or Clerk of the Course (at their own discretion) will be fully authorised to prohibit the vehicle from competing. Under car weather shields, wheel liners or any other OEM fitted under car shielding may be retained or removed, however the replacement of any under body shielding constructed in alternative material is prohibited.

5.6.1.4 **Silhouette:**

All cars must retain the original E36 BMW Compact profile.

The only permitted front bumper is the E36 M-Sport or M3 version, of either standard BMW part or pattern part. It is permitted to fit the BMW E36 EVO front lip of either standard BMW part or pattern part (see BMW Compact Cup Technical File). The only permitted rear boot spoiler is the M-Tec (P/n 51712490022 or P/n 51712490023) spoiler or pattern part (see BMW Racedays Compact Cup Technical File). The front and rear bumpers must not be aesthetically modified in any other way, and must appear as standard (other than for localised trimming to allow fitment of towing straps). Other than the additions in 5.7.5 it is not permitted to add any materials to the inside or outside of the bumpers.

Any standard BMW E36 rear bumper is permitted. If the BMW E36 M-Sport rear bumper is used it must be fitted with the diffuser insert (See BMW Racedays Compact Cup Technical File).

The use of tape to bridge gaps between panels is not permitted unless accepted to be for reasons of safety by the scrutineer.

5.6.1.5 **Ground Clearance:**

It is permitted to adjust the ride height. Under no circumstances must any part of the bodywork, or suspended part of the car excluding the exhaust system, be below a horizontal plane passing 50mm above the ground. The car should be in normal racing trim with the driver (in full racing kit) seated normally in the car and steering in straight ahead position. Scrutineers may use a gauge of 50mm before or after races or practice to check the ground clearance; the vehicle may be stationary or moving during any testing. There is no minus tolerance to this measurement.

5.6.2 Modifications Prohibited:

5.6.2.1 General:

The exterior of the car must be standard for the model being raced. All of the body shell and any replacement body panels must be of original shape, material and thickness. The reduction in thickness of any part of the car by acid dipping, blasting or by any other means is prohibited. Exterior trim must be generally standard.

5.6.2.2 Interior:

Door trims and panels may not be removed unless they are replaced by appropriate material as detailed in 5.6.1.2 above. Any other modification in contravention of 5.6.1.2 is also prohibited

5.6.2.3 Exterior:

It is not permitted to increase the width of the wheel arch by the addition of material. It is permitted to roll the inside of the wheel arch. Holes for brake ducting may not be made in the bodywork.

5.6.2.4 Silhouette:

Any in contravention of 5.6.1.4.

5.6.2.5 Ground Clearance:

Any in contravention of 5.6.1.5.

5.7 Engine

5.7.1 Permitted Specification

The only permitted engine for use in the 2019 Compact Cup Series is the BMW M44B19 16v.

Bore: 85mm (nominal). Standard bore size only.

Stroke: 83.5 (nominal).

Other than the specific exceptions within these rules engine parts must be standard unmodified OEM parts or standard unmodified pattern parts manufactured for the M44.

Verification of legality of standard engine parts will be by comparison to the BMW Racedays Compact Cup Technical File or by any means necessary.

Verification of legality of pattern engine parts will be by any means necessary.

Verification comparison will (either singularly or collectively) be by dimensional comparison or by weight comparison or by visual comparison or by all comparisons.

Non compliance with any singular or collective aspect as mentioned above will render the part non compliant with regulations.

It is permitted to skim the cylinder head face. The minimum overall cylinder head height shall be 139mm. No tolerance. (Ref: BMW Racedays Compact Cup Technical File). A cylinder head measuring under the quoted minimum dimension will be viewed as non compliant with regulations.

It is permitted to skim the cylinder block deck. OEM or pattern pistons must not protrude above the cylinder block deck in excess of .254mm. (.010"). No tolerance. (Ref: BMW Racedays Compact Cup Technical File). An engine with pistons protruding above the quoted maximum dimension will be viewed as non compliant with regulations. Machining of pistons is not permitted.

Camshafts must be standard OEM parts. Camshaft dimensions, profiles and timing must remain as standard BMW E36 318ti Compact M44B19. (Ref: BMW Racedays Compact Cup Technical File)

- 1) The OEM standard dual mass flywheel may be used. Verification of legality of an OEM standard dual mass flywheel will be by comparison to a standard unmodified OEM standard dual mass flywheel. (Ref: BMW Racedays Compact Cup Technical File)
- 2) A BMW M40 single mass flywheel (Part No. 11 22 1739 315) may be used. Verification of legality of a BMW M40 single mass flywheel will be by comparison to a standard unmodified BMW M40 single mass flywheel (Ref: BMW Racedays Compact Cup Technical File)
- 3) A Valeo "solid flywheel" (part number 835017) may be used. Verification of legality of a Valeo "solid flywheel" (part number 835017) will be by comparison to a standard unmodified Valeo "solid flywheel" (part number 835017). (Ref: BMW Racedays Compact Cup Technical File). Only the above flywheels are permitted.

All competing vehicles must be fitted with an unmodified OEM exhaust manifold as fitted to a Right Hand Drive car and as shown in the BMW Racedays Compact Cup Technical File, irrespective of the car being left or Right Hand Drive.

NB. Specific details are contained within the BMW Racedays Compact Cup Technical File. This file is to be used in conjunction with the 5.7: ENGINE regulations and is the definitive document in the comparison of 'standard engine parts'.

Engine bolts. Four bolts for the valve cover, two bolts for the sump, two bolts for the upper timing cover and two bottom bell housing bolts must be cross-drilled through their heads with a hole of minimum 1/16th" diameter. All of the above cross drilled bolts must be fitted to the engine in a position that allows the scrutineer's locking wire to be accepted. Should these bolts be fitted in a position that does not allow this, the scrutineer can instruct the competitor to reposition them to the scrutineer's chosen position.

5.7.1.1 **Engine Seals: General**

Any engine may at any time be sealed by the Eligibility Scrutineer (or deputy). Where fitted, and as of that instant those engine seals will be considered as a mandatory part of the scrutineering requirement for that vehicle, including at subsequent events in the Series. The validity of any seal sanctioned by the Eligibility Scrutineer at any event, or until removal by the Eligibility Scrutineer will remain effective for the entirety of that Series season, including for the purposes of post season scrutineering inspections.

Submission of a previously sealed engine at a subsequent scrutineering inspection of the 2019 Series displaying broken or omitted seals, will be in breach of Scrutineering requirements and as such liable to the penalties outlined in C3.1.1 , C3.5.1 and C3.5.2. in the current Motorsport UK ' Year Book.

Should a previously sealed engine be replaced by another engine then the following will apply:

- a) The use of the replacement engine shall be at the discretion of the Eligibility Scrutineer.
- b) The previously sealed engine must be inspected by the Eligibility Scrutineer and proven to be legal.
- c) Failure of either of the above will entail implementation of the penalties outlined in C3.1.1, C3.5.1 and C3.5.2.
- d) The replacement engine will be sealed.

5.7.2 N/A

5.7.3 **Engine Mounts**

Position and mounting method must be standard for the model. Original engine mounts may be replaced by the Vibra-technics mount with the part number BMW362MX. No other aftermarket or solid engine mounts are permitted.

5.7.4 **Oil/Water Cooling**

Water radiators must be BMW OEM standard parts or standard pattern parts. OEM or aftermarket electric fans are permitted.

5.7.5 **Induction Systems:**

The fitment and positioning of the throttle body and mass air flow sensor must be as OEM.

The air ducting between the mass airflow sensor and the throttle body must remain as OEM.

The air ducting between the mass airflow sensor and the air filter must remain as OEM.

The crankcase breather may vent directly to a catch tank to Motorsport UK requirement Q 19.9.2 and Q 19.9.3, and any holes in the air filter housing associated with the breather system may be blanked.

The upper part of the air box must remain as OEM.

The lower part of the air filter box may be fitted with one hose (100mm max dia.) for the purpose of cold air pickup from the front nearside (RHD) fog light aperture of the car only. (Ref: BMW Racedays Compact Cup Technical File)

This hose and fittings must be fitted within and not protruding forward of the front nearside (RHD) fog light aperture

This single hose may enter the lower air box in any position however if a new entry hole is made in the lower air box then the original OEM air intake hole must be blanked.

It is permitted to remove all sound attenuating material and associative retaining structure from the internals of the upper and lower part of the air box.

No other or extra holes are permitted to be made in the lower air box

An original profile air filter element must be fitted to the air box during qualifying and racing, however the brand of air filter element is free.

No other modifications in the induction system are permitted

5.7.6 **Exhaust Systems**

Exhaust systems must exit at the rear of the vehicle. The standard RHD E36 318ti M44 engine exhaust manifold must be retained and must not be modified. The remainder of the exhaust system including silencer is free. All cars must run with a fully operational catalytic converter fitted in the original position within the exhaust system; this may be the standard BMW part or any aftermarket version. Aftermarket catalysts must have a minimum substrate density of 100cps and a minimum substrate diameter & length of 100mm. Emissions testing may be carried out to ensure compliance.

A standard or pattern lambda sensor must be fitted in or close to its original position within the exhaust system. It is permitted to disconnect the lambda electrical connector.

5.7.7 Ignition Systems

The only ECU permitted is the 2019 Compact Cup Series item that is only available from the BRSCC BMW Compact Cup Championship. No alternative or additional ECU is permitted. The Series Co-ordinator or the Eligibility Scrutineer at any time throughout a race meeting may request the ECU from any car in exchange for a Compact Cup Championship 'Control' ECU. The mandatory fitting of the 'control' ECU must be witnessed by the Eligibility Scrutineer. The competitors' original ECU may be retained by the Eligibility Scrutineer for compliance testing. The 'control' ECU as witnessed fitted, must remain fitted for the duration requested by the Series Co-ordinator or the Eligibility Scrutineer. Alternatively, and only after permission has been granted by the Series Co-ordinator or the Eligibility Scrutineer, the 'control' ECU may be removed and re-exchanged for the competitor's original ECU, the removal witnessed by the Series Co-ordinator or the Eligibility Scrutineer. Refusal to comply with any of the above procedures may result in the competitor being disqualified from the race meeting results, or from the Series in total.

Plug leads and spark plugs are free.

5.7.8 Fuel Delivery Systems

It is permitted to substitute the fuel lines and filter. Dual immersed fuel pumps may be fitted in the fuel tank but must be original BMW standard or pattern items only. If the OEM standard fuel pressure is to be retained, the fuel pressure regulator used must be a 'standard' or 'pattern part'.

If the fuel pressure is chosen to be set to this series regulation maximum, then the only permitted method of achieving this fuel pressure is via the use of the series 'control' fuel pressure regulator available only from the BRSCC BMW Compact Cup Championship. These regulators are uniquely branded and may be checked for conformity at any time. Other than by fitment of a 'standard', 'pattern part' or series 'control' fuel pressure regulator, no other method or form of fuel pressure adjustment or regulator is permitted.

Fuel Pressure testing may be carried out by any means necessary and at any time to ensure that the fuel rail pressure meets the OEM minimum pressure and/or does not exceed **4 bar**.

5.8 Suspension

5.8.1 Permitted Modifications

It is a mandatory requirement for all cars to be fitted with the GAZ Gold Compact Cup specification coilover shock absorber kit. Other than by way of a repair by the GAZ Shocks factory, no modification or alteration of this kit is permitted. There is a mandatory series spring kit, and these springs must only be purchased directly from the BRSCC BMW Compact Cup Championship. The rear spring set consists of 2 main springs, 2 tender springs and 2 adaptors. The main springs have a 178mm free length and 58mm internal diameter. These will be printed with an ID showing an Eibach logo, production week and year, and also "BMW Compact Cup Rear". The rear tender springs have an 86mm free length and 58mm internal diameter. These will be printed with an ID showing an Eibach logo, production week and year, and also part number ERS-225-225-150 printed on in. This is a black spring. The main rear spring plus tender spring **must** be used together.

The front spring set consists of 2 main springs only. These have a 7 inch free length and an internal diameter of 65mm. These will be printed with an ID showing "BMWCC2019". No front tender or helper springs are permitted.

The bump stops as supplied with the GAZ Gold Compact Cup specification coilover kit must be used as mandated by GAZ Shocks both in numbers of bump stops fitted and position of fitment. No alteration to the GAZ bump stops or fitting of additional bump stops is permitted.

Anti roll bars must be OEM standard Part BMW E36 Compact items of the following diameter and must be fitted, connected and operational during qualifying and racing: Standard Front 25mm and Rear 14mm or Sport Front 26mm and Rear 16mm or Optional Sport Front 26mm and Rear 14mm. Other mismatching of roll bar combinations is not permitted.

Roll bar drop links must be dimensionally compliant with E36 Compact Standard OEM or Standard Pattern parts.

Specification	Front Diameter	Rear Diameter
Standard	25mm	14mm
Sport	26mm	16mm
Optional	26mm	14mm

GAZ adjustable front top mounts are permitted. Suspension bushes must be of a rubber or "Polybush" construction. Rose joints are not permitted other than on top mounts offered as an option by Gaz Shocks with the suspension kit. Only the front 'lollypop' wishbone bushes are permitted to be of eccentric design on the front suspension. The upper front shock absorber bracket must be secured to the hub by way of either a BMW E36 Compact OEM bolt or an M12 bolt of similar properties.

The removal of the rear suspension OEM spring seat plates is permitted. Only BMW E36 Compact 'standard' or 'pattern parts', or Powerflex part number PFR5-306GBLK adjustable rear trailing arm suspension bushes are permitted to be used in the rear suspension. No other type of bushes are permitted.

5.8.2 **Prohibited Modifications**

Modification to the front suspension or rear suspension pick-up points is prohibited by any means or method whatsoever. BMW E36 M3& M3 EVO wishbones and hub knuckle bearings are not permitted.

Other than by the provisions of 5.8.1 it is prohibited to alter or adjust the front or rear camber by any method.

5.8.3 **Wheelbase**

The wheelbase must remain standard @ (2700mm).

5.9 **Transmission**

5.9.1 **Permitted Specifications**

The standard part OEM gearbox must be retained.

The only permitted gear ratios are as follows: 1st: 4.23, 2nd: 2.52, 3rd: 1.66, 4th: 1.22, 5th: 1.00.

Clutches must remain standard road parts and no competition items are permitted.

An OEM or aftermarket "quick shift" manual gear change mechanism is permitted.

OEM mechanisms are defined as being of a 'three major part construction' and contained below the tunnel with only the shift lever protruding above the tunnel.

Any 'aftermarket' quick shift system employed as an alternative to the OEM mechanism must be patterned on the OEM system both in construction and positioning below the tunnel with only the shift lever protruding above the tunnel.

The replacement shift lever length must not exceed the OEM shift lever length above the tunnel.

Final drive ratio must be 3.38:1.

The use of any Limited Slip Differential is prohibited.

Gearbox mountings must be standard or patterns parts, or aftermarket poly bush type only. Solid mountings are not permitted.

5.10 Electrics

5.10.1 Exterior Lighting

Must be as per standard OEM fitment location and be fully operational. Aftermarket fully plastic headlamp units are permitted. Front lights/lamps must be taped to Motorsport UK regulations or covered with a transparent protective plastic / vinyl film.

5.10.2 Rear Warning Light

Cars must be fitted with a manually switchable rearward facing red warning light which must be fully compliant with the Motorsport UK Year Book ruling: Section K 5.1. The high level OEM rear brake light may be used for this purpose.

5.10.3 Batteries

No restrictions on type or location subject to Motorsport UK regulations. A battery and electric starter motor must be fitted and be capable of repetitive starts. No external (slave) batteries may be used.

5.11 Brakes

5.11.1 Permitted Modifications

Brake pads are free.

Deformation or removal of back plates is permitted, as is the fitment of alternative brake piping/hosing.

Anti-lock braking system must be disabled and removed.

Discs may be standard or standard pattern.

Front discs must be of a maximum diameter of 286mm. Rear discs must be of a maximum diameter of 272mm. Discs may be cross-drilled and/or grooved.

Standard E36 318 Ti M44 Compact front and rear brake callipers must be used.

The braking system must remain fully operational in all aspects and at all times.

The handbrake both in mechanical parts and operation must remain and function as OEM. No modification or deletion of parts is permitted. The handbrake lever must not be of the 'flyoff' type and must operate as originally fitted to the car.

Brake biasing valve/system may be replaced with a proprietary pressure-limiting valve, which may be adjustable by the driver but must provide a minimum of 25% of braking effort to either axle as per Motorsport UK Regulation Q19.5.

5.11.2 **Prohibited Modifications**

A hydraulically operated handbrake is not permitted.

BMW E36 M3 discs and callipers are specifically prohibited. A rear brake hydraulic line lock is not permitted.

5.12 **Wheels/Steering**

5.12.1 Permitted Options

It is permitted to use any BMW E36, E46 or Z3 steering rack. Modification of the chosen steering rack is prohibited. Power assistance may be disabled.

STEERING LOCK: If fitted with a steering lock, this should be rendered inoperative, unless the vehicle is driven to the circuit on the highway. Motorsport UK regulation Q19.6

5.12.2 **Prohibited Options**

No machining or other modification of the road wheel(s) is permitted.

5.12.3 **Construction & Materials**

Any road wheel used must be of a one-piece construction of aluminium alloy only.

Magnesium wheels are prohibited.

5.12.4 **Dimensions**

15" x 7J" (Minimum ET15)

5.12.5 **Wheel Spacers**

Spacers are permitted up to a maximum of 15mm per hub; however a combination of spacer and wheel must limit the ET to ET15.

5.13 **Tyres**

5.13.1 **Specifications**

From the tyres listed in the Motorsport UK Year Book, Section L, list 1B, the control tyre for the 2019 Series is Nankang 195/50R15 86W NS-2R 180 (STREET) XL. 2019 control tyres are uniquely branded for the Series, and are only available to purchase from Nankang Tyre UK. Any other tyre is prohibited.

It is prohibited to buff, cut or mechanically interfere with the tyres in any manner. The original tread pattern must remain visible at all times, and with a minimum tread depth of 1.6mm.

5.13.2 **Nominated Suppliers**

Nankang Tyres. Call 0121 5005010 or email motorsport@nankangtyre.co.uk

5.13.3 The use of tyre heating/heat retention devices, tyre treatments and compounds is prohibited.

5.14 **Vehicle Weight**

Minimum 1150 kgs including driver post practice or race. Random checks will be carried out during the season and no car/driver combination shall be below this minimum weight. All minimum weights are including driver and race overalls, helmet, residual fuel etc.

5.15 **Fuel Tank/Fuel**

5.15.1 **Types**

An OEM Standard unmodified fuel tank must be fitted.

5.15.2 **Location**

Tank must remain in OEM standard location.

5.15.3 **Fuel**

Only petrol as defined in Section B Nomenclature & Definitions, Pump Fuel (a) section of the Motorsport UK Yearbook and complying with, BSEN228 may be used. The use of additives by competitors which boost the octane rating (RON) in any petrol is prohibited. At the end of practice and the race at least 3 litres of petrol from the tank of the competing car must be available to the scrutineers for analysis. Compliance with minimum weight for the car will be taken before the petrol is removed.

5.16 **Silencing**

All vehicles must comply with the relevant maximum noise limits set out in Motorsport UK Year Book regulation J. Chart 5.18.

5.17 **Numbers & Series Decals**

5.17.1 **Positions**

The race numbers for each rear side window shall be as per Motorsport UK General Regulation Q.11.4.1;

- (i) 200mm high.
- (ii) With a stroke width of at least 20mm.
- (iii) Coloured Day-Glo yellow.
- (iiii) Driver names are permitted but must appear under the race numbers on each rear side window and be in white font only at a maximum of 100mm each letter.

In addition, the windscreen of all cars must display the competition number positioned on the upper area of the passenger side of the windscreen, as follows;

- (i) The numerals must be 150mm high
- (ii) Be in the same colour and font as those displayed on the rear side windows
- (iii) Be placed no closer than 50mm from the lower edge of the windscreen "sun-strip" and 50mm from the side edge of the windscreen.
- (iiii) Driver and/or team names are not permitted on the windscreen.

Series Sponsor's decals must be affixed in the positions detailed on the diagram supplied by the Series Co-ordinator. Series Sponsor's decals take preference to any other decals. It is not permitted to make any alterations or additions to Series decals including the front and rear sun strips. Drivers may be requested to remove decals that are viewed as conflicting with official Series Sponsors. Failure to comply will render the vehicle and driver ineligible to race.

5.17.2 **Suppliers**

Sponsors and Club decals will be available at or before the first Series race in which the vehicle is entered. Competition numbers will be obtained at the competitor's expense.

6. APPENDICES

The Following Commercial Undertakings are not subject to the Judicial Procedures of Motorsport UK/MSC.

6.1 RACE ORGANISING CLUBS AND CONTACTS

Knockhill Motor Sports Club
Knockhill Racing Circuit
By Dunfermline
Fife
KY12 9TF
Tel. 01383 723337
club@knockhill.co.uk

6.2 COMMERCIAL UNDERTAKINGS

6.2.1 VEHICLE PRESENTATION

The presentation of the car is fundamental to the profile of the Series its sponsors and its audience. Therefore in considering whether to permit any car to participate, at any point during the season, the organisers will regard as paramount the presentation of the car. In taking into account its appearance inherent in which is the standard of its presentation (including interior) they may exclude any car which they consider may prejudice the reputation of the Series or is otherwise unacceptable. This will include where the car is presented at an event bearing accident damage sustained at a previous event and which has not been subject to the completion of a full and proper repair.

6.2.2 ADVERTISING / GLASS

- (a) All glass areas must remain clear and unobstructed by decals/advertising or any other obstruction unless these regulations specify different or are approved by the Knockhill Motor Sports Club / Series Co-ordinator.
- (b) The only exception being the rear side windows that should have the drivers' surname, clearly displayed in simple bold type together with the allocated competition number displayed in accordance with Q.11.4 and Q.11.4.1. Competition numbers must also be displayed in the vehicle windscreen in accordance with Q.11.4.2. Please note Motorsport UK General Regulation H.28.1.4 – No display on a transparent surface can exceed 13cm in depth.
- (c) All surfaces, which have not been claimed for stickers by the Organisers, the Series sponsors or used for the application of starting numbers, are free for use. The Series Co-ordinator must approve conflicting sponsor's stickers in advance and the position, size and colours (if approved) will be at the discretion of the Series Co-ordinator.
- (d) Please note Motorsport UK General Regulation H.28.1.2 – The display must not be offensive.
- (e) Competitors may be required to display Series sponsors stickers / decals in locations determined by the Organisers. Display of these stickers is mandatory for participation in the Series.

6.3 TRADE SUPPORT

The organisers reserve the right to obtain support sponsorship for the Series, usually by means of product for competitors. To qualify, this may require fixing support sponsors' logos on either side of the car.

6.4 PROMOTIONAL ACTIVITIES

Drivers may be required to participate in promotional activities at certain events.