2018 - MG TROPHY

CHANGES FROM 2017 REGULATIONS ARE UNDERLINED

SR1 SPORTING REGULATIONS – GENERAL

SR 1.1 TITLE AND JURISDICTION

The MG Trophy is organised and administered by the MG Car Club in accordance with the General Regulations of the Royal Automobile Club Motor Sports Association (incorporating the provisions of the International Sporting Code of the FIA) and these Championship Regulations.

I MSA Championship Permit No (CHR2018/R071), Race Status: Minimum National B. MSA Championship Grade: D.

SR 1.2 OFFICIALS

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1.2.1 I Championship Co-ordinator:

Bruce Woods, c/o MG Car Club, .

Telephone: 01483 504071, Mobile: 07836 358300, Email: Trophy@mgzrx.com

1.2.2 Licensed Eligibility Scrutineer:

Peter Elliott, 147 Toft Hill, Bishop Auckland, Co Durham, DL14 0JB

Telephone: 01388 833778, Mobile: 07711 630707 - Email: peterselliott@yahoo.co.uk

1.2.3 Championship Stewards:

Paul Goodman, Eric Metcalfe, Brian Halford.

Championship Stewards

(G) 2.7 Championship Stewards may only adjudicate on any disputes, irregularities or appeals arising from the approved Championship regulations.

(G) 2.7.1 Championship Stewards are also empowered to consider any request from the Championship co-ordinator to penalise any Competitor for any breach of Championship regulations after holding a formal hearing to impose a penalty in accordance with C.2.1.1 (subject to the rights of appeal provided for in Section C).

(W)2.2.1 The Championship Stewards can only adjudicate upon any disputes, irregularities or appeals arising from the approved Championship Regulations. They are also empowered to consider any request from the Championship Co-ordinator to penalise any Competitor for breach of Championship Regulations and, after holding a formal hearing, To impose a penalty in accordance with C.2.1, subject to the rights of appeal to the MSC provided in Section C.

- 1.2.4 Championship Clerk of the Course Andy Green
- 1.2.5 I Treasurer <u>Dickon Siddall</u>

SR 1.3 COMPETITOR ELIGIBILITY

- 1.3.1 Entrants must be (a) fully paid up valid membership card holding members of the MG Car Club and (b) be registered for the Championship and (c) be in possession of a valid current MSA Entrants Licence.
- 1.3.2 Drivers and Entrant/Drivers must (a) be fully paid up valid membership card holding members of the MG Car Club, (b) be Registered for the Championship and (c) be in possession of a valid Competition (Racing) minimum National B STATUS licence. Or, (d) be a professional driver in possession of a valid Licence (featuring an EU 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 Championship 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 fulfill registration for the Championship. A driver shall not take time out of their education to participate in motor sport without the prior approval of their education establishment.
- 1.3.3 All necessary documentation must be presented for checking at all rounds when signing-on.
- 1.3.4 Deleted superseded by 1.6.5

REGISTRATION SR 1.4

- 1.4.1 All drivers must register as competitors for the Championship (but see SR 1.3.4 above) by returning the Registration Form with the Registration Fee to the Championship Treasurer. Any driver registered with another MGCC championship may race in a maximum of four rounds of the Trophy Championship without the need to pay a second registration fee. However, in this case, in the absence of a championship sponsor, the co-ordinator will reserve the right to make a charge towards the cost of the championship decals and plates that MUST be carried by all competitors. Points will NOT be awarded until the driver registers for the Trophy championship. No points can be backdated.
- 1.4.2 The Standard Registration Fee is £320. This can be reduced by the application of one or more of the following discounts:-"Early Bird Discount" If applying before 31st January 2018 Subtract £40
 - "New Driver Discount" If never competed in MG Trophy before Subtract £30

 - "20 and Under Discount" If Aged 20 or under on 01/01/18 Subtract £95
 "25 and Under Discount" If Aged over 20, but 25 or under on 01/01/18 Subtract £45
 - "Class Progression Discount" (Competing 2018 in Class A having raced 2017 in either Class B or Class C, or competing 2018 in Class B having raced 2017 in Class C) Subtract £50

All applicable discounts may be combined. The fee includes a maximum of £180 towards the TV filming costs for the year, the balance being paid by the championship. Fees are to be made payable to 'The MG Car Club Ltd – MG Trophy'.

Registrations will be accepted from 1st January 2018. Competitors registering with 4 or less rounds of the Championship remaining will be eligible for race awards but will not score Championship points nor will their entry be taken into account in calculating other competitors' Championship points. See 1.6.1

- Registration numbers will be the permanent Competition number for the Championship. 1.4.3
- When first registering for the Championship the competitor's name will be registered against the class entered and Championship 1.4.4 points will be allocated to that Registration. If a competitor changes classes during the season re-registration will not be required and previously allocated Championship points will be carried forward and can be added together for that competitors final Championship points score. This will ONLY apply provided there is just ONE class change during the season.

SR 1.5 **CHAMPIONSHIP ROUNDS**

The MG Trophy Championship will be contested over 12 Rounds as follows:

Round No.	Date	Circuit	Organising Club/Centre
1 & 2 (DH)	April 7 th	Silverstone (Nat)	MG Car Club
3 & 4 (DH)	April 28 th /29 th	Brands Hatch (Indy)	MG Car Club
5 & 6 (DH)	June 2 nd /3rd	Silverstone (GP)	MG Car Club
7 & 8 (DH)	July 14 th /15 th	Donington	MG Car Club
9 & 10 (DH)	September 1 st	Oulton Park (Intl)	MG Car Club
11 & 12 (DH)	September 29 th	Snetterton 300	MG Car Club

DH = Double header rounds.

SR 1.6 POINTS SCORING

- One point will be awarded to Competitors whose entries are received by the closing date provided that competitor also takes part in 1.6.1 the qualifying session. One point will be awarded for the fastest race lap in each class. One point will be awarded for pole position in each class. Race points will be awarded to Competitors (but not guest drivers) listed as starters (see 1.6.4) in each class as follows: $1^{st} - 20$, $2^{nd} - 17$, $3^{rd} - 16$, $4^{th} - 15$, $5^{th} - 14$, $6^{th} - 13$ and thereafter down to 1 point for all starters. However if any class falls below 5 starters the points allocation in that class will be as follows: For 4 starters $1^{st} - 17$, $2^{nd} - 14$, $3^{rd} - 13$, $4^{th} - 12$. For 3 starters $1^{st} - 16$, $2^{nd} - 13$, $3^{rd} - 12$. For 2 starters $1^{st} - 15$, $2^{nd} - 12$. For 1 starter $1^{st} - 14$. Competitors who are classified as non-finishers (DNF), will not score any race points.
- The Competitor's final Championship points score will be determined by the sum of their scores from the total number of 1.6.2 Championship rounds run less two, this can include rounds they don't go to. Where this is a scoring round, the dropped score is the race score only i.e it does NOT include the entry on time point and any other additional points. Drivers excluded from the results for sporting/technical infringements will not score any points for that round and may not use that round as the discarded round.
- Ties shall be resolved using the formula in W 1.3.4 in the current MSA Yearbook. 1.6.3
- 1.6.4 Where the race distance has been reduced (2.6) it shall still count as a full point scoring round.
- The MG Trophy championship reserves the right to waive the registration fee (only) in order to run "Guest Competitors" at any one 1.6.5 DH weekend. Following this the driver will need to register if he wants to race again but can pay a pro rata fee for the remainder of the season. It is a requirement that all drivers are members of the MGCC. Guest drivers will not score points but will be considered to be a starter, see 1.6.7. Guest drivers will qualify for event awards. Guest drivers will comply with the eligibility criteria as prescribed in Article 1.3 above, with the exception of 1.3.1 (b) and 1.3.2 (b), as appropriate.
- In order to score points and awards, all cars are required to display at all times the official MGCC decal, windscreen strip, a pair of 1.6.6 MG Car Club badges, front and back, MG number plates and any other Championship and sponsor decals supplied by the Organisers. All of these locations will be specified and must be adhered to.

1.6.7 A starter is defined as one who complies with the Blue Book definition Q12.7.

SR 1.7 AWARDS

- 1.7.1 All race awards are provided by the MG Car Club at their race meetings. At non MGCC meetings awards are provided from championship funds.
- 1.7.2 Per round: A garland to the overall race winner and Trophies to 1st, 2nd and 3rd in each of the four classes providing there are a minimum of 3, 5 & 7 starters respectively. There will also be a Driver of the Race Award at each round.
- 1.7.3 I Championship: Trophies to the top 3 points scoring competitors overall <u>from Classes A & B,</u> plus Trophies to the 1st, 2nd and 3rd in each class. The following additional trophies will also be presented:- Novice driver, Highest placed Lady driver, Spirit of the Championship, Season Improvement, Luti Endeavour, Drivers' Driver, True Grit and the Best Presented Race Car. The 3, 5, 7 rule will apply to the class awards. Awards will only be made to those drivers who have competed in at least half the number of rounds.
- 1.7.4 Presentations

Awards will be presented at the end of each event, and/or at the end of the Championship at the designated presentation ceremony.

1.7.5 Entertainment Tax Liability:

In accordance with current government legislation, the MG Car 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 MG Car Club 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. Fax. 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 MG Car Club in good condition within 7 days.

SR 2 CHAMPIONSHIP 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 fees prior to the entry closing dates which shall be as stated in the Supplementary Regulations for the 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 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. D25.1.12 applies.
- 2.1.4 The Entry Fee for each event shall be specified in the Supplementary Regulations 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.

SR 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.

SR 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 (MSA Regulations Q4.5).
- 2.3.3 I Following qualification all cars MUST be presented at Parc Ferme for post qualifying inspection unless told otherwise.

SR 2.4 RACES

Should any race be disrupted the Clerk of the Course shall not be obliged to resume or rerun the race ((Q)5.4) (1.6.4 above applies).

SR 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 of Green Flag/Pace Lap Start Engines/Clear Grid.
- II. 30 seconds Visible and audible warning for start of Green Flag/Pace Lap.
- III. A 5 second board will be used to indicate that the grid is complete.
- IV. The red lights will be switched on for 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 pit lane and may start the race after the last car has passed the start line or pitlane exit, whichever is the later to take the start from the grid.
- 2.5.4 Any driver unable to take the Green Flag/Pace lap or start or required to indicate their situation as per MSA 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 Marshalls Signaling 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 staring 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 MSA, Circuit Management and Organising Club Safety Regulations are complied with at all times
- 2.7.2 Pit Lane: 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 Refueling: May only be carried out in accordance with the MSA 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 or as specified by the Race Organising Club or Circuit Management.

SR 2.8 I 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 pit lane.
- VI. All cars MUST be presented at Parc Ferme for post race inspection unless told otherwise. J3.1

SR 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. (MSA regulation (D)26.3).

SR 2.10 TIMING MODULES

All cars must be fitted with transponders complying with the requirements of TSL Sports Timing or as the requirements of the timekeepers.

SR 2.11 QUALIFICATION RACES

If any event is over subscribed the Organising Club may at their discretion run Qualification Races.

SR 2.12 OPERATION OF SAFETY CAR

The Safety Car will be brought into operation and run in accordance with Section Q, Appendix 2 of the MSA General Regulations.

SR 2.13 ONBOARD CAMERAS

Permission to use onboard cameras will be given by the Race Organising Club or Circuit Management. See new General Regulation J5.21

SR 3 SPECIFIC CHAMPIONSHIP REGULATIONS

The use of substitute cars at any round is prohibited.

SR 4 SPECIFIC CHAMPIONSHIP PENALTIES

In accordance with Section C of the current MSA Yearbook and as below.

- 4.1 Infringements of Technical Regulations
- 4.1.1 Arising from post practice Scrutineering or Judicial Action:
 Minimum Penalty The provisions of MSA Regulations C 3.3.
- 4.1.2 Arising from post race Scrutineering or Judicial Action:

Minimum Penalty – The provisions of MSA Regulations C 3.5.1 (a) & (b)

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 Deleted see 4.3
- 4.3 Additional specific championship penalties
- 4.3.1 The Championship Stewards reserve the right to impose penalties on Competitors proven by the Officials of any meeting to have behaved on or off the track in a manner considered to have brought the Championship into disrepute. Penalties may include individual race bans, loss of awards or Championship points or end of season awards. In the case of repeated offences the Championship Stewards reserve the right to exclude any Competitor for a fixed number of races or from the Championship. In such cases no other Competitors' Championship scores shall be adjusted.

TR 6 TECHNICAL REGULATIONS – Class A MG ZR 190

TR 6.1 INTRODUCTION

6.1.1 The following Technical Regulations for MG ZR 190 Class A cars are set out in accordance with the MSA specified format **and it should be clearly understood that if the following texts do not clearly specify that you can do it, you must work on the principle that you cannot.** All cars must be presented for scrutineering in a clean and tidy condition. Race damage must be rectified at the earliest opportunity. Cars not meeting these criteria may be excluded at scrutineering or referred to the championship eligibility scrutineer for consideration.

TR 6.2 GENERAL DESCRIPTION

- 6.2.1 The MG Trophy Championship is for Competitors participating in the specially built MGZR 3 door cars which were supplied by MG Sport & Racing specifically for the series and/or cars which have been built to comply with these Technical Regulations subject to acceptance by the Eligibility Scrutineer.
- 6.2.2 Deleted.
- 6.2.3 Deleted.
- 6.2.4 Left hand drive cars are eligible.

TR 6.3 SAFETY REQUIREMENTS

- 6.3.1 The following Articles of MSA Regulations K (Safety). Safety Criteria Regulations will apply as relevant with certain mandatory requirements in excess of MSA minimum standards.
- 6.3.2 Only Roll Cages (ROPS) that comply with section K (except drg #11) in the current MSA Yearbook may be used. In addition door bars for the left hand door and for the right door are mandatory. The standard road car door side impact bars MUST be retained.
- 6.3.3 Roll Cage padding material is mandatory and must be installed on all parts of the cage which could come in contact with the driver's body, arms, leg or head.
- A Safety Harness homologated by the FIA with a minimum of 6 anchorage points as per MSA Regulation K 2.1.4 is mandatory and must be worn in accordance with the manufacturers instructions during all qualifying practice and races. Non-compliance will be deemed to be a technical offence and subject to the penalties specified in SR.4. These belts have an expiry date after which they must not be used. In the event of a serious accident, belts must be replaced as a matter of course as unseen damage may have occurred.
- 6.3.5 A 4.0L electrically or mechanically operated plumbed in Fire Extinguisher system is mandatory. The bottle must be mounted in the passenger footwell with the external trigger adjacent to the external battery isolator pull switch. The internal trigger must be mounted within reach of the driver whilst harnessed in, both must be clearly identified by a red E decal.
- 6.3.6 A Battery Isolator Kit is mandatory and must be fitted in accordance with MSA Regulation K 8.
- 6.3.7 A race seat to FIA standard 8855-92 or 8855-99 is mandatory. The seat must be installed as per MSA Regulation K 2.2. It is permissible to fit extra cushioning to this seat providing that the material meets fire retardant specification source 5 and is covered in seat material to the same fire retardant specification. Tank tape is not permissible as a covering. It is permitted to extend the Mounting Brackets or reposition seat mounting rails in order to accommodate drivers.
- 6.3.8 The Steering Lock and Central Locking System must be rendered inoperable.
- 6.3.9 Throughout the practice, qualifying practice or race, drivers must wear an approved helmet and other regulatory safety clothing including overalls, gloves, vests and boots to MSA safety requirement K 9.1-10.2.
- 6.3.10 Two front and two rear towing eyes of minimum 60mm internal diameter are mandatory and must be fitted within the confines of the vehicle body, refer to technical spec CZR/0001 for fitting instructions. The eyes must be painted red, yellow or orange contrasting with adjacent bodywork and correctly identified.
- 6.3.11 Competitors are advised that the use of a Head and Neck Restraint System (FHR Frontal Head Restraint) device is mandatory from the 1/1/16. Any FHR device used must comply with the FIA code.
- 6.3.12 Both front windows must be operable at all times.
- 6.3.13 Heaters and ducting must not be removed and they must be plumbed in and operable.
- 6.3.14 I The use of safety film on the side windows is permitted.

TR 6.4 GENERAL TECHNICAL REQUIREMENTS AND EXCEPTIONS

- 6.4.1 Deleted.
- The Engine, Gearboxes and ECUs of all Class A race cars are required to be sealed as specified by the championship scrutineer. Details of the location and type of seals are available to any potential purchaser of a second hand race car. It is a condition of eligibility for the Championship that these seals remain intact at all times during and between events for which the cars are eligible to compete. A seal may only be broken or sealed components unsealed with the specific written (e mail) approval in advance by the championship MSA Eligibility Scrutineer or his nominated deputy. Failure to comply with this regulation will be deemed to be an infringement of these Technical Regulations. It will be reported for judicial action to the Clerk of the Course, if discovered prior to the results of an event being declared official, or to the Championship Stewards, if discovered between events.

Infringement will render the Competitor concerned liable to the penalties laid down in SR.4.1.2. a) and b) or c) if discovered during an event or SR.4.1.2. b) or c) if discovered between events.

6.4.3 Notwithstanding these Technical Regulations it is the competitor's responsibility to ensure his/her car, when presented at scrutineering, complies with MSA technical Regulations Q 19.1-19.6 as appropriate, also section J and the Supplementary regulations for the Championship event.

TR 6.5 CHASSIS

6.5.1 See TR 6.8

TR 6.6 BODYWORK

TR 6.6.1 Modifications Permitted

- 6.6.1.1 The rear wiper and it's motor may be removed.
- 6.6.1.2 A driver Floor Panel and the addition of plates to the throttle, clutch and/or brake pedals is permitted.
- 6.6.1.3 A Radio Aperture Blanking Plate must be fitted.
- 6.6.1.4 The standard OEM bonnet and tailgate design and material must be secured by two Bonnet Pin Sets.
- 6.6.1.5 The laminated Windscreen is mandatory. The use of proprietary Anti-Mist solutions is authorised
- 6.6.1.6 It is permitted to close floor drain holes in the cockpit, the engine and luggage compartments, and in the front wheel arches. The holes may be closed using only sheet metal or plastic materials, and may be welded, stuck or riveted. The other holes in the bodywork may be closed, by adhesive tape only.
- 6.6.1.7 With the exception of any nut, bolt, screw or locking device which is part of or affects any sealed component or ancillary of a sealed component which may or may not be replaced or changed, or the functions of any steering or suspension part, then, throughout the car any other nut, bolt, screw may be replaced by any other kind of proprietary locking device (washers, locknut, Nyloc or Loctite).
- 6.6.1.8 Left and Right Hand Door Casings in a composite material must be fitted in place of the standard trim.
- At all times the car with driver on board must pass over a clearance gauge (115.0 mm) located at the lower arm inner pivot point. This is based upon a minimum front trim height of 320.0 mm front hub centre to wheel arch.
- 6.6.1.10 It is permitted to fit secure seat mounting rails and seat belt anchorage points for a passenger seat. This must be done as per the drivers' seat mounting.
- 6.6.1.11 Seam welding to the bulk head, front turrets, front longitudinals and sills of the body shell is highly recommended.
- 6.6.1.12 Any 'finisher' panels must only be screwed in place so access to the inner structure is made possible.

TR 6.6.2 Modifications Prohibited

- 6.6.2.1 Body shell (or identical specifications) are the only shells permitted in this series.
- 6.6.2.2 Reworking or modification to the interior bodywork except where specified in these regulations is prohibited.
- 6.6.2.3 Reworking or modification to the exterior bodywork except where specified in these regulations is prohibited.
- The silhouette may not be modified in any way except for mandatory Competition Parts authorised for this Championship or their direct equivalents.
- 6.6.2.5 The use of 'Gaffa' tape to seal shut lines is prohibited unless this is to temporarily repair accident damage.

TR 6.7 ENGINE

The 1,796cc K series 4 cylinder 16 valve, DOHC VHPD ZR normally aspirated power unit, built to Championship specification (ZR190 - 01) and fully sealed (see TR 6.4.2) is mandatory. Alternatively a modified DOHC VVC head to technical spec E190/0001 may be used instead. A dyno test may be implemented at any time by the championship scrutineer who will use an approved supplier. Any engine refreshes carried out by the owners must be pre approved by the championship scrutineer who may insist that a dyno report is supplied. Any seals that are removed must be refitted on completion of any engine work. Seals removed at race meetings to allow remedial work to be carried out can only be done with the permission of the scrutineer or nominated deputy who will refit the seals on completion.

Post practice, post qualifying or before or after the race or at any time the engine performance may be checked and information relating to sensor outputs, temperatures, etc, downloaded for the evaluation and assessment by specialist personnel under the direction and at the discretion of the MSA Eliqibility Scrutineer or his nominated deputy.

The height of the engine block is to be 281.5mm (minimum). Any blocks found to be greater than this can be skimmed down to this dimension.

TR 6.7.1 Permitted Modifications

- 6.7.1.1 The use of steel flywheels from PTP or B&G are permitted with a minimum weight of 2.8Kgs, these may not be reworked.
- 6.7.1.2 The use of the Chinese manufactured replacement engine block is permitted.
- 6.7.1.3 I <u>To better locate the main crankshaft seal three screws can be used.</u>
- 6.7.1.4 I <u>Uprated valve spring caps are permitted.</u>

TR 6.7.2 Prohibited Modifications

- 6.7.2.1 Access within any component of the power unit or any sealed component is forbidden, unless approved by the scrutineer (see TR 6.4.2)
- 6.7.2.2 Except as specified hereafter, all modifications are prohibited.

TR 6.7.3 Location

6.7.3.1 The engine/transmission must remain in its original location.

TR 6.7.4 Oil/Water Cooling

- 6.7.4.1 The fitting of oil coolers is permitted.
- 6.7.4.2 The OEM type ZR160 Coolant Radiator is mandatory and must be fitted as specified. A 50/50 Glycol and water mixture with no additives is strongly recommended. The use of 'waterless coolants' is permitted.
- 6.7.4.3 Oil systems must be in accordance with Q 19.9.2 & 19.9.3
- 6.7.4.4 I Replacement silicone coolant hoses are permitted.

TR 6.7.5 Induction Systems

- 6.7.5.1 An ITG Air Filter is mandatory and must be correctly installed.
- 6.7.5.2 I Twin throttle bodies #MBH 101650 (45mm) are mandatory and may not be modified in any manner. <u>A Jenvey replacement will be confirmed during the season.</u>

TR 6.7.6 Exhaust Systems

- 6.7.6.1 The OEM ZR160 Exhaust Manifold and Janspeed Down Pipe are mandatory. The internal welding may be removed to a diameter of 35mm (+/- 1mm) at the manifold/head end and 40.5mm (+/- 1mm) at the manifold/downpipe end, no further modification is allowed. The use of exhaust tape/heat cloth or specific exhaust coatings may be used.
- 6.7.6.2 A Catalyst of 100 cell minimum is mandatory on all cars and must be fitted with an accessible inspection plug. The catalyst must be fitted in the exhaust centre section.
- 6.7.6.3 I The exhaust must comply with technical spec X190/0001. A short flexible section may be added at the Downpipe/Centre section ioint.
- 6.7.6.4 Heat reflective tape can be used on underside body above catalyst and the exhaust pipe.

TR 6.7.7 Ignition Systems

- 6.7.7.1 A sealed MG Rover cars ECU is mandatory and will be subjected to exchange and interrogation by specialist personnel. All ECU's must initially be sent to Kmaps for checking and sealing and must display the Kmaps sticker. The ECU map ref is Kmaps CT01LX16 and only this map is allowed.
- 6.7.7.2 All sensors and relevant wiring must remain functional and intact, any addition, modification or removal is prohibited.
- 6.7.7.3 Additional instrumentation that requires any wiring must be approved by the MSA Eligibility Scrutineer before use in any official qualifying practice or race.
- 6.7.7.4 Additional knobs, rheostats or switches are prohibited.
- 6.7.7.5. Wiring direct to ECU multiplugs is prohibited except for a connection to Pin 25, which allows E.R.P.M to be monitored by data acquisition systems.
- 6.7.7.6 Upgraded ignition leads to coil packs and plugs are free.

TR 6.7.8 Fuel Delivery Systems

- 6.7.8.1 All sensors and relevant wiring must remain intact, any addition or removal is forbidden.
- 6.7.8.2 It is prohibited to add or modify any component to the system, except in accordance with 6.15.
- 6.7.8.3 Standard fuel pressure (3 bar max) and cream/black injectors as originally fitted are mandatory.

TR 6.8 CHASSIS/SUSPENSION

TR 6.8.1 Permitted Modifications

- Front Suspension T.C.A Left Hand and Right Hand or pattern are mandatory, it is permitted to fit spherical bearings to the inner joint. These components and their attachments must not be further modified or reworked, other than seam welding to the lower beams to add strength and prevent bending.
- 6.8.1.2 The Front Anti-Roll Bar Assembly is #RBL 100650 is mandatory and must be fitted to the Front Longditudinals with Mounting Plates #EGP 1661 and uprated bushes. It is permitted to fit Jubilee Clips to the Anti-Roll Bar in order to reduce lateral movement of the bar within its mountings.
- 6.8.1.3 Front & Rear Dampers are restricted to 2 way adjustable only and are free.

Sentence deleted.

- 6.8.1.4 Front Uprights #RUB 101820 and #RUB 101830 are mandatory.
- 6.8.1.5 Front Lower Tie Rods #RBL 10014 are mandatory and must be fitted with uprated bushes.
- 6.8.1.6 Front Anti Roll Bar drop links must be fitted with uprated bushes.
- 6.8.1.7 Front negative camber angle must not exceed 4.2 degs maximum using B&G BGZ 09
- 6.8.1.8 The fitting of Rear Anti-Roll Bar Assemblies #RGB 100450 or #RGB 100460 is permitted.
- 6.8.1.9 Front and Rear springs are free.
- 6.8.1.10 Rear beam #RGH 100660 and its standard fixation is mandatory. Uprated bushes are mandatory.
- 6.8.1.11 It is permitted to fit rear camber plate and shim washers between rear hub and rear beam #RGH 100660. Negative camber angle 3.5 degs maximum. Correct shims and high tensile bolts (grade 10.9) of the correct length must be used.
- 6.8.1.12 Rear dampers may be droop restricted.
- 6.8.1.13 The fitting of air jacks is permitted.
- 6.8.1.14 The fitting of polybushes is permitted up to 95 shore (black).
- 6.8.1.15 The fitting of BGZ race 5 to the rear top mounts is permitted.

TR 6.8.2 Prohibited Modifications

- 6.8.2.1 It is not permitted to modify the front and rear damper in any way. But see 6.8.1.12
- 6.8.2.2 Except where affected by mandatory Competition Parts suspension or brake components the wheelbase and track must remain within production dimensions.

TR 6.9 TRANSMISSIONS

TR 6.9.1 Permitted Modifications

- 6.9.1.1 Gearbox with a Quaife differential is mandatory (but see 6.9.1.7 below) and sealed after assembly by the championship approved supplier. The two bolts shown in technical spec GZR/0002 MUST be drilled, prior to the first race, as shown to enable a seal to be fitted. Maintenance access is permitted but only after the written permission of the MSA Eligibility Scrutineer is obtained. See also TR 6.4.2.
- 6.9.1.2 The use of Quaife manufactured replacement (complete) gear sets part no QKE3R using the first gear ratio option of 3.000 is permitted. These can only be used with a final drive ratio of 3.923. Drivers using replacement gear sets must log their first time usage with the MSA eliqibility scrutineer.
- 6.9.1.3 Clutches are free but must remain single plate and must mount to the existing flywheel mounting lugs. Cable operation must be retained.
- 6.9.1.4 It is permitted to modify the gear lever by shortening and/or cranking it. A new gear lever to this specification is available. The modified gear lever and linkage will not now be part of the standard specification.
- 6.9.1.5 The gear linkage attachment to the gearbox is free and may be wire locked to prevent dislocation of the ball joint.
- 6.9.1.6 It is permissible to use the modified powerflex bush kit to gearbox stabiliser bar.
- 6.9.1.7 Cars in this class may also use the PG1 gearbox as fitted to the Class B & C cars with the Quaife ATB diff fitted. See technical spec GZR/0001.

TR 6.9.2 Prohibited Modifications

TR 6.9.3 Transmission and Drive Ratios

- 6.9.3.1 The ratios as per the original MG supplied gearbox (6.9.1.1) or as per the Quaife replacement (6.9.1.2) must not be changed.
- 6.9.3.2 Left Hand Drive Shaft #GCV 1155/GCV 1088 and Right Hand Drive Shaft #GCV 1216/GCV 1088 are mandatory and may not be modified or reworked.

TR 6.10 ELECTRICS

The use of data acquisition/logging systems are allowed and interrogation of these systems by championship personnel must be made available. Additional championship data logging devices may be fitted in specified locations and data from these will be used to interrogate vehicle performance for comparison purposes.

TR 6.10.1 Exterior Lighting

- 6.10.1.1 The rear/stop lights together with indicators must be maintained and functional at all times.
- 6.10.1.2 The production Headlight Assemblies must remain standard and operational.

TR 6.10.2 Rear Fog Light

6.10.2.1 Both Rear Fog Lights must be 'EU' marked and functional at all times. Either one central light or two equally spaced lights must be used and these must be in accordance with K5.1

TR 6.10.3 Batteries

- 6.10.3.1 Batteries are free providing they are securely retained in the production location. The use of a ratchet strap or an additional mechanical fixing is mandatory.
- 6.10.3.2 The Battery Earth (Ground) lead must be clearly identified with yellow covering (tape or sheath).
- 6.10.3.3 The Battery Positive (Live) lead must be adequately insulated (not with tape).

TR 6.10.4 Generators

6.10.4.1 The complete charging circuits and all components must remain functional at all times. All modifications are prohibited.

TR 6.10.5 Instrument Pack and Ancillaries

- 6.10.5.1 The production instrument pack and upper centre console must remain and the instruments must be functional with the exception of the speedometer.
- 6.10.5.2 Additional instruments may be fitted. The instruments and their mounting must not present any sharp edges or intrude upon driver safety.
- 6.10.5.3 The sensors and wiring harness required for any additional instruments must be separate, clearly defined and must not be spliced into any other wiring harness except as in TR 6.7.7.5.
- 6.10.5.4 The inertia switch must be rendered inoperative.

6.10.5.5 I The standard wiring harnesses, their associated sensors and electronic control units must not be modified or added to but see TR 6.10.5.3 Replacement harnesses WZR/0001 may be fitted provided they are to this specification only.

TR 6.11 BRAKES

TR 6.11.1 Permitted Modifications

- 6.11.1.1 Master cylinder STC 441 and Servo Unit GSM 90166 are mandatory and must be mounted in its original position.
- 6.11.1.2 The cockpit sited adjustable Rear Brake Fluid Pressure Limiting Valve is mandatory.
- 6.11.1.3 I Re-equipping with quality braided hoses is mandatory and rear brake lines may be re-routed inside the car.
- 6.11.1.4 Front Brake Discs #GBD 90852 or equivalent are mandatory.
- 6.11.1.5 Front Brake Calipers #GBC 90209 LH and #GBC 90208 RH or equivalent are mandatory.
- 6.11.1.6 Rear Brake discs #SDB 000290 or equivalent are mandatory.
- 6.11.1.7 Rear Brake Calipers #SMC 000120 (right) and #SMC 000130 (left) or equivalent are mandatory.
- 6.11.1.8 A handbrake system or line lock may be fitted.
- 6.11.1.9 Mintex brake pads front and rear are mandatory.
- 6.11.1.10 It is permitted to fit ducting to the front brakes from the fog light aperture provided the aperture shape/size remains unaltered. The ducting is free.
- 6.11.1.11 Uprated front wheel drive flanges are recommended.

TR 6.12 WHEELS/STEERING

TR 6.12.1 Permitted Options

- 6.12.1.1 Steering Wheel type is free but it must be attached to the steering column with quick release mechanism.
- 6.12.1.2 The steering column lock assembly must be removed.
- 6.12.1.3 Alloy Road Wheels #RRC 001500 MNH are mandatory. The wheel dimension is 7" x 17. Wheels may be refurbished any colour provided all 4 wheels are the same.
- 6.12.1.4 Power steering rack is mandatory and its fixation must remain standard.
- 6.12.1.5 Front wheel spacers up to 10mm are permitted with the appropriate length wheel studs.
- 6.12.1.6 Wheel nuts should be tightened to 110N/m cold, 90N/m hot, do not overtorque with wheel nut gun.

TR 6.12.2 Prohibited Options

- 6.12.2.1 All modifications or additions except Competition Parts detailed above are prohibited.
- 6.12.2.2 Any modification to the road wheels is prohibited.
- 6.12.2.3 Construction and materials must remain as per original parts.

TR 6.13. TYRES

TR 6.13.1 Specifications

- 6.13.1.1 I All cars will run on an approved and controlled Dunlop tyre 205/620R17 G84D CM720 compound (dry) tyre or 205/620R17 G84W 404 compound (wet) tyre.
- A maximum of twelve new dry tyres will be allowed if competing in all 12 rounds. Any competitor competing in less rounds will be allowed to start with 4 new tyres then one new tyre for each additional round entered. A tyre check sheet will be issued to enable all competitors to keep a note of their tyre usage.
- 6.13.1.3 All treatment of the tyres is forbidden, e.g. chemical or thermal treatment including the use of heated tyre covers. The removal of rubber pick up is permitted. Pressure relief valves are not permitted.
- 6.13.1.4 The use of Nitrogen as an inflation medium is permitted.
- 6.13.1.5 I All directional tyres MUST be used the correct way around at all times.

TR 6.14 WEIGHTS

- 6.14.1 The minimum weight for the car is 1040 Kgs as the car finishes practice or the race with driver and helmet and remaining fuel.
- 6.14.2 Deleted
- Any additional ballast required to achieve this weight can be obtained from the MSA Eligibility Scrutineer and must be fitted in the front passenger seat area as specified using the MGCC approved fitting kit as stated in technical spec CZR/0002.
- 6.14.4 The weight established by weighing devices used by the MSA Eligibility Scrutineer or his deputy during scrutineering for an event is definitive.

TR 6.15 FUEL TANK/FUEL

- 6.15.1 The following are all allowed:- Swirl pots, bag tanks or aluminium tanks. The replacement system must be no lower than the original tank. When using a swirl pot the secondary high pressure pump must be mounted after the swirl pot in a leak proof container. The original MG Rover fuel tank may be baffled or foam filled. The original canister filter may be removed provided a non-vented filler cap with breather and roll over valve is fitted.
- 6.15.2 Only Pump Fuel (100RON max) available at roadside filling stations and to MSA Blue Book section "Nomenclature and Definitions (B)" may be used. No additives permitted.
- 6.15.3 The fitting of dry break fuel filling system is allowed but the filler is to be located on the original side of the car to the rear of the B post.

TR 6.16. SILENCING

- 6.16.1 Refer to 6.7.6
- 6.16.2 At all times the noise level must respect MSA J 5.18, for testing, qualifying, practice or race. The maximum permitted level is 105 dB(A) measured at 0.5 meters from the main exhaust outlet at an angle of 45° at 3/4 maximum rpm.

TR 6.17 NUMBERS and CHAMPIONSHIP DECALS

6.17.1 Positions

All cars are to fit the MGCC competition panel decal to the door sill immediately behind the front wheel on both sides of the car. In addition windscreen headers, MGCC badges and front/rear Championship number plates are to be fitted in accordance with drawings which will be supplied. Space must also be left for race sponsor decals which will be fitted under the rubbing strip OR on the remaining area on each sill on both sides of the car. Any other mandatory sponsor decals will be provided and must be fitted as shown.

- 6.17.1.2 Advertising is allowed on the windscreen but it must not obscure the driver's vision. This will be limited to the championship windscreen header and one additional decal not exceeding 300mm x 90mm. The drivers name must be displayed on the rear side glass along the lower edge and may be displayed on the rear screen along the lower edge, see Q 19.2.2. The suggested font is Myriad Pro Bold, 50mm height, colour white.
- 6.17.1.3 Competition numbers are to be located in accordance with Q11.4, 11.4.1 & 11.4.2

6.17.2 Suppliers

6.17.2.1 Decals will be provided free by the MGCC to all registered competitors. Replacements will be charged for.

TR7. TECHNICAL REGULATIONS - Class B MG ZR 170

7.1 INTRODUCTION

- 7.1.1 The following Technical Regulations for MG ZR170 Class B cars are set out in accordance with the MSA specified format **and it should be clearly understood that if the following texts do not clearly state that you can do the works you should work on the principle that you cannot.** All cars must be presented for scrutineering in a clean and tidy condition. Race damage must be rectified at the earliest opportunity. Cars not meeting these criteria may be excluded at scrutineering or referred to the championship eligibility scrutineer for consideration.
- 7.1.2 No modifications are permitted from the standard production specification other than those specified hereafter or listed in official Technical Bulletins.
- 7.1.3 Unless where specified below, the ZR 170 Class will comply with the current general Championship regulations for the MG Trophy.

TR7.2 GENERAL DESCRIPTION

- 7.2.1 The MG Trophy Championship is for Competitors participating in standard MGZR 3 door cars which use body shells from ZR105, ZR120, ZR160 and Rover 25 cars but must conform totally to ZR170 specification, with these Technical Regulations subject to acceptance by the Eliqibility Scrutineer.
- 7.2.2 MOT Certificates, road insurance and Road Fund Licences are not required.
- 7.2.3 Only original MG/Rover equipment parts (or equivalents) may be used to maintain the car in good order.
- 7.2.4 Left hand drive cars are eligible.

7.3 SAFETY REQUIREMENTS

- 7.3.1 The following Articles of MSA Regulations. See section K. Safety Criteria Regulations will apply as relevant with certain mandatory requirements in excess of MSA minimum standards.
- 7.3.2 Only Roll Cages (ROPS) that comply with section K (except drg #11) in the current MSA Yearbook may be used. In addition door bars for the left hand door and for the right door are mandatory. The standard road car door side impact bars MUST be retained.
- 7.3.3 Roll Cage padding material is mandatory and must be installed on all parts of the cage which could come in contact with the driver's body, arms, leg or head.
- A Safety Harness homologated by the FIA with a minimum of 6 anchorage points as per MSA Regulation K 2.1.4 is mandatory and must be worn in accordance with the manufacturers instructions during all qualifying practice and races. Non-compliance will be deemed to be a technical offence and subject to the penalties specified in SR.4. These belts have an expiry date after which they must not be used. In the event of a serious accident, belts must be replaced as a matter of course as unseen damage may have occurred.
- 7.3.5 A 4.0L electrically or mechanically operated plumbed in Fire Extinguisher system is mandatory. The bottle must be mounted in the passenger footwell with the external trigger adjacent to the external battery isolator pull switch. The internal trigger must be mounted within reach of the driver whilst harnessed in, both must be clearly identified by a red E decal.
- 7.3.6 A Battery Isolator Kit is mandatory and must be fitted in accordance with MSA Regulation K 8.
- 7.3.7 A race seat to FIA standard 8855-92 or 8855-99 is mandatory. The seat must be installed as per MSA Regulation K 2.2. It is permissible to fit extra cushioning to this seat providing that the material meets fire retardant specification source 5 and is covered in seat material to the same fire retardant specification. Tank tape is not permissible as a covering. It is permitted to extend the Mounting Brackets or reposition seat mounting rails in order to accommodate drivers.
- 7.3.8 The Steering Lock and Central Locking System must be rendered inoperable, except for road going cars driven to the event.
- 7.3.9 Throughout the practice, qualifying practice or race, drivers must wear an approved helmet and other regulatory safety clothing including overalls, gloves, vests and boots to MSA safety requirement K 9.1-10.2.
- 7.3.10 Two front and two rear towing eyes of minimum 60mm internal diameter are mandatory and must be fitted within the confines of the vehicle body, refer to technical spec CZR/0001 for fitting instructions. The eyes must be painted red, yellow or orange contrasting with adjacent bodywork and correctly identified.
- 7.3.11 Competitors are advised that the use of a Head and Neck Restraint System (FHR Frontal Head Restraint) device is mandatory from the 1/1/16. Any FHR device used must comply with the FIA code.
- 7.3.12 Both front windows must be operable at all times.
- 7.3.13 I The use of safety film on the side windows is permitted.
- 7.3.13 Heaters and ducting must not be removed and they must be plumbed in and operable.

TR 7.4 GENERAL TECHNICAL REQUIREMENTS AND EXCEPTIONS

an event or SR.4.1.2. b) or c) if discovered between events.

- 7.4.1 The Engine, Gearboxes and ECUs of all Class B race cars are required to be sealed as specified by the championship scrutineer. Details of the location and type of seals are available to any potential purchaser of a second hand race car. It is a condition of eligibility for the Championship that these seals remain intact at all times during and between events for which the cars are eligible to compete. A seal may only be broken or sealed components unsealed with the specific written (e mail) approval in advance by the championship MSA Eligibility Scrutineer or his nominated deputy. Failure to comply with this regulation will be deemed to be an infringement of these Technical Regulations. It will be reported for judicial action to the Clerk of the Course, if discovered prior to the results of an event being declared official, or to the Championship Stewards, if discovered between events.

 Infringement will render the Competitor concerned liable to the penalties laid down in SR.4.1.2. a) and b) or c) if discovered during
- 7.4.2 Notwithstanding these Technical Regulations it is the competitor's responsibility to ensure his/her car, when presented at scrutineering, complies with MSA technical Regulations Q 19.1-19.6 as appropriate, also section J and the Supplementary regulations for the Championship event.

TR 7.5 CHASSIS

7.5.1 See TR 7.8

TR 7.6 BODYWORK

TR 7.6.1 Modifications Permitted

- 7.6.1.1 The rear wiper and it's motor may be removed.
- 7.6.1.2 The passenger seat and rear seat must be removed.
- 7.6.1.3 The original factory fitted door panels may be replaced by composite material panels to accommodate the roll cage.
- 7.6.1.4 The spare wheel and tool kit must be removed.
- 7.6.1.5 Airbags must be removed or de-activated.
- 7.6.1.6 A driver Floor Panel and the addition of plates to the throttle, clutch and/or brake pedals is permitted.
- 7.6.1.7 A Radio Aperture Blanking Plate must be fitted.
- 7.6.1.8 The standard OEM bonnet and tailgate design and material must be secured by two Bonnet Pin Sets.
- 7.6.1.9 A laminated Windscreen is mandatory. The use of proprietary Anti-Mist solutions is authorised
- 7.6.1.10 It is permitted to close floor drain holes in the cockpit, the engine and luggage compartments, and in the front wheel arches. The holes may be closed using only sheet metal or plastic materials, and may be welded, stuck or riveted. The other holes in the bodywork may be closed, by adhesive tape only.
- 7.6.1.11 With the exception of any nut, bolt, screw or locking device which is part of or affects any sealed component or ancillary of a sealed component which may or may not be replaced or changed, or the functions of any steering or suspension part, then, throughout the car any other nut, bolt, screw may be replaced by any other kind of proprietary locking device (washers, locknut, Nyloc or Loctite).
- 7.6.1.12 At all times the car with driver on board must pass over a clearance gauge (115.0 mm) located at the lower arm inner pivot point. This is based upon a minimum front trim height of 320.0 mm front hub centre to wheel arch.
- 7.6.1.13 Seam welding is recommended to the bulk head, front turrets, front longitudinals and sills.
- 7.6.1.14 It is permitted to fit secure seat mounting rails and seat belt anchorage points for a passenger seat. This must be done as per the drivers' seat mounting.
- 7.6.1.15 Any fitted air con may be removed.
- 7.6.1.16 Strut Braces may be fitted front and rear.
- 7.6.1.17 Any 'finisher' panels must only be screwed in place so access to the inner structure is made possible.

TR 7.6.2 Modifications Prohibited

- 7.6.2.1 Deleted.
- 7.6.2.2 Reworking or modification to the interior bodywork except where specified in these regulations is prohibited.
- 7.6.2.3 Reworking or modification to the exterior bodywork except where specified in these regulations is prohibited.
- 7.6.2.4 The original silhouette may not be modified in any way.
- 7.6.2.5 The use of 'Gaffa' tape to seal shut lines is prohibited unless this is to temporarily repair accident damage.

TR 7.7 ENGINE

The OEM 1,796cc K series 4 cylinder 16 valve, DOHC VVC ZR normally aspirated power unit only must be used. The engine will be fully sealed at the start of the season (see TR 6.4.2). A dyno test may be implemented at any time by the championship scrutineer who will use an approved supplier. Any engine refreshes carried out by the owners must be pre approved by the championship scrutineer who may insist that a dyno report is supplied. Any seals that are removed must be refitted on completion of any engine work. Seals removed at race meetings to allow remedial work to be carried out can only be done with the permission of the scrutineer or nominated deputy who will refit the seals on completion. Forged pistons are NOT allowed.

Post practice, post qualifying or before or after the race or at any time the engine performance may be checked and information relating to sensor outputs, temperatures, etc, downloaded for the evaluation and assessment by specialist personnel under the direction and at the discretion of the MSA Eliqibility Scrutineer.

The height of the engine block is to be 281.5mm (minimum). Any blocks found to be greater than this can be skimmed down to this dimension.

TR 7.7.1 Permitted Modifications

- 7.7.1.1 The use of steel flywheels from PTP or B&G are permitted with a minimum weight of 2.8Kgs, these may not be reworked.
- 7.7.1.2 Cylinder heads are 118.95 119.05 mm thick. These may be skimmed down to the datum point, a witness of this datum point must remain to be seen.
- 7.7.1.3 The use of the Chinese manufactured replacement engine block is permitted.
- 7.7.1.4 I To better locate the main crankshaft seal three screws can be used.
- 7.7.1.5 I <u>Uprated valve spring caps are permitted.</u>

TR 7.7.2 Prohibited Modifications

- 7.7.2.1 Access within any component of the power unit or any sealed component is forbidden, unless approved by the scrutineer (see TR 7.4.1)
- 7.7.2.2 Except as specified hereafter, all modifications are prohibited.

TR 7.7.3 Location

7.7.3.1 The engine/transmission must remain in its original location.

TR 7.7.4 Oil/Water Cooling

- 7.7.4.1 The fitting of oil coolers is permitted.
- 7.7.4.2 The OEM type ZR160 Coolant Radiator is mandatory and must be fitted as specified. A 50/50 Glycol and water mixture with no additives is strongly recommended. The use of 'waterless coolants' is permitted.
- 7.7.4.3 Oil systems must be in accordance with Q 19.9.2 & 19.9.3
- 7.7.4.4 I Replacement silicone coolant hoses are permitted.

TR 7.7.5 Induction Systems

7.7.5.1 The original MG Rover air filter and induction system may be replaced but no additional ducting is permitted. Only fully enclosed 'after-market' kits may be used and air must only be taken from the existing vertical gap adjacent to the side of the radiator. No cutting of the existing bodywork to enlarge this area is allowed.

TR 7.7.6 Exhaust Systems

- 7.7.6.1 I The OEM ZR160 Exhaust Manifold and Down Pipe are mandatory. The internal welding may be removed to a diameter of 35mm (+/1mm) at the manifold/head end and 40.5mm (+/- 1mm) at the manifold/downpipe end, no further modification is allowed. The use
 of exhaust tape/heat cloth or specific exhaust coatings may be used. The exhaust is free beyond the catalytic convertor but must exit
 from the rear of the car in the standard production location. A catalytic convertor must be retained.
- 7.7.6.2 Heat reflective tape can be used on underside body above catalyst and the exhaust pipe.
- 7.7.6.3 Any replacement catalyst must be 100 cell minimum and must be fitted in the original location with an accessible inspection plug fitted.

TR 7.7.7 Ignition Systems

- 7.7.7.1 A sealed MG/Rover cars ECU of the type originally fitted is mandatory and may be subjected to exchange and interrogation by specialist personnel. All ECU's must initially be sent to Kmaps for checking and sealing and must display the Kmaps sticker. The ECU map ref is Kmaps 07Z170RA and only this map is allowed.
- 7.7.7.2 All sensors and relevant wiring must remain functional and intact, any addition, modification or removal is prohibited.
- 7.7.7.3 Additional instrumentation that requires any wiring must be approved by the MSA Eligibility Scrutineer before use in any official qualifying practice or race.
- 7.7.7.4 Additional knobs, rheostats or switches are prohibited, only OEM parts are to be used.
- 7.7.7.5. Wiring direct to ECU multiplugs is prohibited except for a connection to Pin 25, which allows E.R.P.M to be monitored by data acquisition systems.
- 7.7.7.6 Upgraded ignition leads to coil packs and plugs are free.

TR 7.7.8 Fuel Delivery Systems

- 7.7.8.1 All sensors and relevant wiring must remain intact, any addition or removal is forbidden.
- 7.7.8.2 It is prohibited to add or modify any component to the system, except in accordance with 7.15.
- 7.7.8.3 Standard fuel pressure (3 bar max) and blue injectors as originally fitted are mandatory.

TR 7.8 CHASSIS/SUSPENSION

TR 7.8.1 Permitted Modifications

- 7.8.1.1 Shock absorbers may be changed to single adjustable / adjustable platform type. Adjustable top mounts are permitted (B&G BGZ09) but the front negative camber angle must not exceed 4.2 degs maximum
- 7.8.1.2 Spring rates are free.
- 7.8.1.3 It is permitted to fit rear camber plate between rear hub and rear beam #RGH 100660. Negative camber angle 2.2 degs maximum.
- 7.8.1.4 Rear dampers may be droop restricted.
- 7.8.1.5 The fitting of air jacks is permitted.
- 7.8.1.6 The fitting of polybushes is permitted up to 95 shore (black).
- 7.8.1.7 The fitting of BGZ race 5 to the rear top mounts is permitted.

TR 7.8.2 Prohibited Modifications

- 7.8.2.1 It is not permitted to modify the front and rear damper in any way. But see 7.8.1.4 & 7.8.1.7
- 7.8.2.2 Except where affected by mandatory suspension or brake components, the wheelbase and track must remain within production dimensions.

TR 7.9 TRANSMISSIONS

TR 7.9.1 Permitted Modifications

- 7.9.1.1 It is permitted to modify the gear lever by shortening and/or cranking it. A new gear lever to this specification is available. The modified gear lever and linkage will not now be part of the standard specification.
- 7.9.1.2 Clutches are free but must remain single plate and must mount to the existing flywheel mounting lugs. Cable operation must be retained
- 7.9.1.3 The gear linkage attachment to the gearbox is free and may be wire locked to prevent dislocation of the ball joint.
- 7.9.1.4 It is permissible to use the modified powerflex bush kit to gearbox stabiliser bar.
- 7.9.1.5 The two bolts shown in technical spec GZR/0002 MUST be drilled, prior to the first race, as shown to enable a seal to be fitted. Maintenance access is permitted but only after the written permission of the MSA Eligibility Scrutineer is obtained.

TR 7.9.2 Prohibited Modifications

TR 7.9.3 Transmission and Drive Ratios

7.9.3.1 The OEM ZR 160 gearbox, ratio G4 must be used. This will be sealed by the championship approved supplier or the scrutineer or nominated deputy at the start of the season.

TR 7.10 ELECTRICS

The use of data acquisition/logging systems are allowed and interrogation of these systems by championship personnel must be made available. Additional championship data logging devices may be fitted in specified locations and data from these will be used to interrogate vehicle performance for comparison purposes.

TR 7.10.1 Exterior Lighting

- 7.10.1.1 The rear/stop lights together with indicators must be maintained and functional at all times.
- 7.10.1.2 The production Headlight Assemblies must remain standard and operational.

TR 7.10.2 Rear Fog Light

7.10.2.1 Both Rear Fog Lights must be 'EU' marked and functional at all times. Either one central light or two equally spaced lights must be used and these must be in accordance with K5.1

TR 7.10.3 Batteries

- 7.10.3.1 Batteries are free providing they are securely retained in the production location. The use of a ratchet strap or an additional mechanical fixing is mandatory.
- 7.10.3.2 The Battery Earth (Ground) lead must be clearly identified with yellow covering (tape or sheath).
- 7.10.3.3 The Battery Positive (Live) lead must be adequately insulated (not with tape).

TR 7.10.4 Generators

7.10.4.1 The complete charging circuits and all components must remain functional at all times. All modifications are prohibited.

TR 7.10.5 Instrument Pack and Ancillaries

- 7.10.5.1 The production instrument pack and upper centre console must remain and the instruments must be functional with the exception of the speedometer.
- 7.10.5.2 Additional instruments may be fitted. The instruments and their mounting must not present any sharp edges or intrude upon driver safety.
- 7.10.5.3 The sensors and wiring harness required for any additional instruments must be separate, clearly defined and must not be spliced into any other wiring harness except as in TR 7.7.7.5.
- 7.10.5.4 The inertia switch must be rendered inoperative.
- 7.10.5.5 I The standard wiring harnesses, their associated sensors and electronic control units must not be modified or added to but see TR 7.10.5.3. Replacement harnesses WZR/0001 may be fitted provided they are to this specification only.

TR 7.11 BRAKES

TR 7.11.1 Permitted Modifications

- 7.11.1.1 Mintex brake pads front and rear are mandatory.
- 7.11.1.2 Metal braided hoses are permitted.
- 7.11.1.3 It is permitted to fit ducting to the front brakes from the fog light aperture provided the aperture shape/size remains unaltered. The ducting is free.
- 7.11.1.4 The ABS system may be removed, if so TR 7.11.1.5 is mandatory. If retained fixings and hard brake pipes may be replaced with modern day fixings and metal braided hoses and rear brake lines may be re-routed inside the car.
- 7.11.1.5 The fitting of a cockpit sited adjustable Rear Brake Fluid Pressure Limiting Valve is allowed, as per class A
- 7.11.1.6 A handbrake system or line lock may be fitted.

TR 7.12 WHEELS/STEERING

TR 7.12.1 Permitted Options

- 7.12.1.1 The steering wheel may be changed. A quick release steering wheel is allowed.
- 7.12.1.2 The steering column lock assembly must be removed.
- 7.12.1.3 Only 16 inch wheels as supplied by MG Rover and fitted to MG ZR saloons are permitted when using dry tyres (see below).
- 7.12.1.4 17" wheels may be used with class A wet tyres only.
- 7.12.1.5 Wheels may be refurbished any colour provided all 4 wheels are the same.
- 7.12.1.6 Power steering rack is mandatory and its fixation must remain standard.
- 7.12.1.7 Front wheel spacers up to 10mm are permitted with the appropriate length wheel studs.
- 7.12.1.8 Wheel nuts should be tightened to 110N/m cold, 90N/m hot, do not overtorque with wheel nut gun.

TR7.12.2 Prohibited Options

- 7.12.2.1 All modifications or additions except Parts detailed above are prohibited.
- 7.12.2.2 Any modification to the road wheels is prohibited.
- 7.12.2.3 Construction and materials must remain as specified.

TR7.13. TYRES

TR 7.13.1 Specifications

7.13.1.1 Dry – Dunlop Direzza 03G (DZ03G) size 205/50R16 H1. Tyres must at all times have a minimum tread depth of 2 mm across at least 80% of the tread width.

Wet - As above OR the Dunlop 210/605 R16 A22W 404 compound (wet). Cars may also run the 17" Dunlop wet class A tyre.

A maximum of 4 new dry tyres will be allowed for the first round entered and thereafter 1 additional new dry tyre per round will be allowed. Two new tyres may be used at Double Header meetings for the first race. A tyre check sheet will be issued to enable all competitors to keep a note of their tyre usage.

- 7.13.1.2 All treatment of the tyres is forbidden, e.g. chemical or thermal treatment including the use of heated tyre covers. The removal of rubber pick up is permitted. Pressure relief valves are not permitted.
- 7.13.1.3 I All directional tyres MUST be used the correct way around at all times.

TR 7.14 WEIGHTS

- 7.14.1 The minimum weight for the car is 1040 Kgs as the car finishes practice or the race with driver and helmet and remaining fuel.
- 7.14.2 Any additional ballast required to achieve this weight can be obtained from the MSA Eligibility Scrutineer and must be fitted in the front passenger seat area as specified using the MGCC approved fitting kit as stated in technical spec CZR/0002.
- 7.14.3 The weight established by weighing devices used by the MSA Eligibility Scrutineer or his deputy during scrutineering for an event is definitive.

TR 7.15 FUEL TANK/FUEL

- 7.15.1 The original MG Rover fuel tank may be baffled or foam filled. The original canister filter may be removed provided a non-vented filler cap with breather and roll over valve is fitted. Swirl pots may be fitted, when using a swirl pot the secondary high pressure pump must be mounted after the swirl pot in a leak proof container utilising the original MG Rover fuel pump as a lift pump.
- 7.15.2 Only Pump Fuel (100RON max) available at roadside filling stations and to MSA Blue Book section "Nomenclature and Definitions (B)" may be used. No additives permitted.
- 7.15.3 Dry break fuel fillers are permitted but the filler is to be located on the original side of the car to the rear of the B post.

TR 7.16. SILENCING

- 7.16.1 Refer to 7.7.6
- 7.16.2 At all times the noise level must respect MSA J 5.18, for testing, qualifying, practice or race. The maximum permitted level is 105 dB(A) measured at 0.5 meters from the main exhaust outlet at an angle of 45° at 3/4 maximum rpm.

TR 7.17 NUMBERS and CHAMPIONSHIP DECALS

7.17.1 Positions

- 7.17.1.1 All cars are to fit the MGCC competition panel decal to the door sill immediately behind the front wheel on both sides of the car. In addition windscreen headers, MGCC badges and front/rear Championship number plates are to be fitted in accordance with drawings which will be supplied. Space must also be left for race sponsor decals which will be fitted under the rubbing strip OR on the remaining area on each sill on both sides of the car. Any other mandatory sponsor decals will be provided and must be fitted as shown.
- 7.17.1.2 Advertising is allowed on the windscreen but it must not obscure the driver's vision. This will be limited to the championship windscreen header and one additional decal not exceeding 300mm x 90mm. The drivers name must be displayed on the rear side glass along the lower edge and may be displayed on the rear screen along the lower edge, see Q 19.2.2. The suggested font is Myriad Pro Bold, 50mm hight, colour white.
- 7.17.1.3 Competition numbers are to be located in accordance with Q11.4, 11.4.1 & 11.4.2

7.17.2 Suppliers

7.17.2.1 Decals will be provided free by the MGCC to all registered competitors. Replacements will be charged for.

TR 8 TECHNICAL REGULATIONS – Class C MG ZR 160 (road)

8.1 INTRODUCTION

- 8.1.1 The following Technical Regulations for MG ZR160 Class C cars are set out in accordance with the MSA specified format **and it**should be clearly understood that if the following texts do not clearly state that you can do the works you should

 work on the principle that you cannot. All cars must be presented for scrutineering in a clean and tidy condition. Race damage
 must be rectified at the earliest opportunity. Cars not meeting these criteria may be excluded at scrutineering or referred to the
 championship eligibility scrutineer for consideration.
- 8.1.2 No modifications are permitted from the standard production specification other than those specified hereafter or listed in official Technical Bulletins.
- 8.1.3 Unless where specified below, the ZR 160 Class will comply with the current general Championship regulations for the MG Trophy.

TR 8.2 GENERAL DESCRIPTION

- 8.2.1 The MG Trophy Championship is for Competitors participating in standard MGZR 3 door cars which use body shells from ZR105, ZR120, ZR160 and Rover 25 cars but must conform totally to ZR160 specification, with these Technical Regulations subject to acceptance by the Eligibility Scrutineer.
- 8.2.2 MOT Certificates, road insurance and Road Fund Licences are not required.
- 8.2.3 Only original MG/Rover (OEM) equipment parts (or equivalents) may be used to maintain the car in good order.
- 8.2.4 Left hand drive cars are eligible.

TR 8.3 SAFETY REQUIREMENTS

- 8.3.1 The following Articles of MSA Regulations. See section K. Safety Criteria Regulations will apply as relevant with certain mandatory requirements in excess of MSA minimum standards.
- 8.3.2 Only Roll Cages (ROPS) that comply with section K (except drg #11) in the current MSA Yearbook may be used. In addition door bars for the left hand door and for the right door are mandatory. The standard road car door side impact bars MUST be retained.
- 8.3.3 Roll Cage padding material is mandatory and must be installed on all parts of the cage which could come in contact with the driver's body, arms, leg or head.
- A Safety Harness homologated by the FIA with a minimum of 6 anchorage points as per MSA Regulation K 2.1.4 is mandatory and must be worn in accordance with the manufacturers instructions during all qualifying practice and races. Non-compliance will be deemed to be a technical offence and subject to the penalties specified in SR.4. These belts have an expiry date after which they must not be used. In the event of a serious accident, belts must be replaced as a matter of course as unseen damage may have occurred.
- 8.3.5 A 4.0L electrically or mechanically operated plumbed in Fire Extinguisher system is mandatory. The bottle must be mounted in the passenger footwell with the external trigger adjacent to the external battery isolator pull switch. The internal trigger must be mounted within reach of the driver whilst harnessed in, both must be clearly identified by a red E decal.
- 8.3.6 A Battery Isolator Kit is mandatory and must be fitted in accordance with MSA Regulation K 8.
- 8.3.7 A race seat to FIA standard 8855-92 or 8855-99 is mandatory. The seat must be installed as per MSA Regulation K 2.2. It is permissible to fit extra cushioning to this seat providing that the material meets fire retardant specification source 5 and is covered in seat material to the same fire retardant specification. Tank tape is not permissible as a covering. It is permitted to extend the Mounting Brackets or reposition seat mounting rails in order to accommodate drivers.
- 8.3.8 The Steering Lock and Central Locking System must be rendered inoperable, except for road going cars that hold a current MoT test certificate.
- 8.3.9 Throughout the practice, qualifying practice or race, drivers must wear an approved helmet and other regulatory safety clothing including overalls, gloves, vests and boots to MSA safety requirement K 9.1-10.2.
- 8.3.10 Two front and two rear towing eyes of minimum 60mm internal diameter are mandatory and must be fitted within the confines of the vehicle body, refer to technical spec CZR/0001 for fitting instructions. The eyes must be painted red, yellow or orange contrasting with adjacent bodywork and correctly identified.
- 8.3.11 Competitors are advised that the use of a Head and Neck Restraint System (FHR Frontal Head Restraint) device is mandatory from the 1/1/16. Any FHR device used must comply with the FIA code.
- 8.3.12 Both front windows must be operable at all times.
- 8.3.13 Heaters and ducting must not be removed and they must be plumbed in and operable.
- 8.3.14 I The use of safety film on the side windows is permitted.

TR 8.4 GENERAL TECHNICAL REQUIREMENTS AND EXCEPTIONS

an event or SR.4.1.2. b) or c) if discovered between events.

- 8.4.1 The Engine, Gearboxes and ECUs of all Class C race cars are required to be sealed as specified by the championship scrutineer. Details of the location and type of seals are available to any potential purchaser of a second hand race car. It is a condition of eligibility for the Championship that these seals remain intact at all times during and between events for which the cars are eligible to compete. A seal may only be broken or sealed components unsealed with the specific written (e mail) approval in advance by the championship MSA Eligibility Scrutineer or his nominated deputy. Failure to comply with this regulation will be deemed to be an infringement of these Technical Regulations. It will be reported for judicial action to the Clerk of the Course, if discovered prior to the results of an event being declared official, or to the Championship Stewards, if discovered between events.

 Infringement will render the Competitor concerned liable to the penalties laid down in SR.4.1.2. a) and b) or c) if discovered during
- 8.4.2 Notwithstanding these Technical Regulations it is the competitor's responsibility to ensure his/her car, when presented at scrutineering, complies with MSA technical Regulations Q 19.1-19.6 as appropriate, also section J and the Supplementary regulations for the Championship event.

TR 8.5 CHASSIS

8.5.1 See TR 8.8

TR 8.6 BODYWORK

TR 8.6.1 Modifications Permitted

- 8.6.1.1 The passenger seat and rear seat must be removed.
- 8.6.1.2 The original factory fitted door panels may be replaced by composite material panels to accommodate the roll cage.
- 8.6.1.3 The spare wheel and tool kit must be removed.
- 8.6.1.4 Airbags must be removed or de-activated.
- 8.6.1.5 A driver Floor Panel and the addition of plates to the throttle, clutch and/or brake pedals is permitted.
- 8.6.1.6 A Radio Aperture Blanking Plate must be fitted.
- 8.6.1.7 The standard OEM bonnet and tailgate design and material must be secured by two Bonnet Pin Sets.
- 8.6.1.8 A laminated Windscreen is mandatory. The use of proprietary Anti-Mist solutions is authorised
- 8.6.1.9 It is permitted to close floor drain holes in the cockpit, the engine and luggage compartments, and in the front wheel arches. The holes may be closed using only sheet metal or plastic materials, and may be welded, stuck or riveted. The other holes in the bodywork may be closed, by adhesive tape only.
- 8.6.1.10 With the exception of any nut, bolt, screw or locking device which is part of or affects any sealed component or ancillary of a sealed component which may or may not be replaced or changed, or the functions of any steering or suspension part, then, throughout the car any other nut, bolt, screw may be replaced by any other kind of proprietary locking device (washers, locknut, Nyloc or Loctite).
- 8.6.1.11 At all times the car without the driver on board must pass over a clearance gauge (115.0 mm) located at the lower arm inner pivot point. This is based upon a minimum front trim height of 320.0 mm front hub centre to wheel arch.
- 8.6.1.12 It is permitted to fit secure seat mounting rails and seat belt anchorage points for a passenger seat. This must be done as per the drivers' seat mounting.
- 8.6.1.13 Any fitted air con may be removed.
- 8.6.1.14 All original factory fitted interior trim, fittings, carpets and bracketry may be removed.
- 8.6.1.15 The rear wiper and it's motor may be removed.
- 8.6.1.16 Seam welding is recommended to the bulk head, front turrets, front longitudinals and sills.
- 8.6.1.17 Any 'finisher' panels must only be screwed in place so access to the inner structure is made possible.

TR 8.6.2 Modifications Prohibited

- 8.6.2.1 Reworking or modification to the interior bodywork except where specified in these regulations is prohibited.
- 8.6.2.2 Reworking or modification to the exterior bodywork except where specified in these regulations is prohibited.
- 8.6.2.3 The original silhouette may not be modified in any way.
- 8.6.2.4 The use of 'Gaffa' tape to seal shut lines is prohibited unless this is to temporarily repair accident damage.

TR 8.7 ENGINE

The OEM 1,796cc K series 4 cylinder 16 valve, DOHC VVC ZR normally aspirated power unit or the 1.8i power unit only must be used. The engine will be fully sealed at the start of the season (see TR 8.4.1). A dyno test may be implemented at any time by the championship scrutineer who will use an approved supplier. Any engine refreshes carried out by the owners must be pre approved by the championship scrutineer who may insist that a dyno report is supplied. Any seals that are removed must be refitted on completion of any engine work. Seals removed at race meetings to allow remedial work to be carried out can only be done with the permission of the scrutineer or nominated deputy who will refit the seals on completion. Forged pistons are NOT allowed.

Post practice, post qualifying or before or after the race or at any time the engine performance may be checked and information relating to sensor outputs, temperatures, etc, downloaded for the evaluation and assessment by specialist personnel under the direction and at the discretion of the MSA Eliqibility Scrutineer.

The height of the engine block is to be 281.5mm (minimum). Any blocks found to be greater than this can be skimmed down to this dimension.

TR 8.7.1 Permitted Modifications

- 8.7.1.1 Cylinder heads are 118.95 119.05 mm thick. These may be skimmed down to the datum point, a witness of this datum point must remain to be seen.
- 8.7.1.2 The use of the Chinese manufactured replacement engine block is permitted.
- 8.7.1.3 I To better locate the main crankshaft seal three screws can be used.
- 8.7.1.4 I <u>Uprated valve spring caps are permitted.</u>

TR 8.7.2 Prohibited Modifications

- 8.7.2.1 Access within any component of the power unit or any sealed component is forbidden, unless approved by the scrutineer (see TR 8.4.1)
- 8.7.2.2 Except as specified hereafter, all modifications are prohibited.

TR 8.7.3 Location

8.7.3.1 The engine/transmission must remain in its original location.

TR 8.7.4 Oil/Water Cooling

- 8.7.4.1 The OEM type ZR160 Coolant Radiator is mandatory and must be fitted as specified. A 50/50 Glycol and water mixture with no additives is strongly recommended. The use of 'waterless coolants' is permitted.
- 8.7.4.2 Oil systems must be in accordance with Q 19.9.2 & 19.9.3
- 8.7.4.3 I Replacement silicone coolant hoses are permitted.

TR 8.7.5 Induction Systems

8.7.5.1 An OEM paper air filter must be fitted to the original MG/Rover ZR 160 induction system. No additional ducting or cutting of the existing bodywork is permitted.

TR 8.7.6 Exhaust Systems

- 8.7.6.1 I The OEM ZR160 Exhaust Manifold and Down Pipe are mandatory. The internal welding may be removed to a diameter of 35mm (+/-1mm) at the manifold/head end and 40.5mm (+/-1mm) at the manifold/downpipe end, no further modification is allowed. The use of exhaust tape/heat cloth may be used on the manifold only. The exhaust is free beyond the centre section but must exit from the rear of the car in the standard production location. A catalytic convertor must be retained.
- 8.7.6.2 Heat reflective tape can be used on underside body above catalyst and the exhaust pipe.
- 8.7.6.3 Any replacement catalyst must be 100 cell minimum and must be fitted in the original location with an accessible inspection plug fitted.

TR 8.7.7 Ignition Systems

8.7.7.1 A sealed MG/Rover cars ECU of the type originally fitted is mandatory and may be subjected to exchange and interrogation by specialist personnel. All ECU's must initially be sent to Kmaps for checking and sealing and must display the Kmaps sticker. The ECU map ref is Kmaps 07Z160PR and only this map is allowed.

- 8.7.7.2 All sensors and relevant wiring must remain functional and intact, any addition, modification or removal is prohibited.
- 8.7.7.3 Additional instrumentation that requires any wiring must be approved by the MSA Eligibility Scrutineer before use in any official qualifying practice or race. Lap timers NOT wired into the car wiring loom are allowed.
- 8.7.7.4 Additional knobs, rheostats or switches are prohibited, only OEM parts are to be used.
- 8.7.7.5. Wiring direct to ECU multiplugs is prohibited except for a connection to Pin 25, which allows E.R.P.M to be monitored by data acquisition systems.
- 8.7.7.6 Upgraded ignition leads to coil packs and plugs are free.

TR 8.7.8 Fuel Delivery Systems

- 8.7.8.1 All sensors and relevant wiring must remain intact, any addition or removal is forbidden.
- 8.7.8.2 It is prohibited to add or modify any component to the system, except in accordance with TR 8.15.
- 8.7.8.3 Standard fuel pressure (3 bar max) and blue injectors as originally fitted are mandatory.

TR 8.8 CHASSIS/SUSPENSION

TR 8.8.1 Permitted Modifications

- 8.8.1.1 The fitting of polybushes up to 95 shore (black) is permitted.
- 8.8.1.2 The fitting of 30mm lower springs all round is permitted and recommended, the part numbers are CMCDF1 (front) and CMCDR1 (rear) available from CMC Motorsport.

TR 8.8.2 Prohibited Modifications

- 8.8.2.1 It is not permitted to modify the front and rear damper in any way.
- 8.8.2.2 Except where affected by mandatory suspension or brake components, the wheelbase and track must remain within production dimensions.

TR 8.9 TRANSMISSIONS

TR 8.9.1 Permitted Modifications

- 8.9.1.1 It is permitted to modify the gear lever by shortening and/or cranking it. A new gear lever to this specification is available.
- 8.9.1.2 AP fast road clutches are allowed but must remain single plate. Cable operation must be retained.
- 8.9.1.3 The gear linkage attachment to the gearbox is free and may be wire locked to prevent dislocation of the ball joint.
- 8.9.1.4 I The two bolts shown in technical spec GZR/0002 MUST be drilled, prior to the first race, as shown to enable a seal to be fitted. Maintenance access is permitted but only after the written permission of the MSA Eligibility Scrutineer is obtained.

TR 8.9.2 Prohibited Modifications

TR 8.9.3 Transmission and Drive Ratios

8.9.3.1 The OEM ZR 160 gearbox, ratio G4 must be used. This will be sealed by the championship approved supplier or the scrutineer or nominated deputy at the start of the season.

TR 8.10 ELECTRICS

The use of data acquisition/logging systems are allowed and interrogation of these systems by championship personnel must be made available. Additional championship data logging devices may be fitted in specified locations and data from these will be used to interrogate vehicle performance for comparison purposes.

TR 8.10.1 Exterior Lighting

- 8.10.1.1 The rear/stop lights together with indicators must be maintained and functional at all times.
- 8.10.1.2 The production Headlight Assemblies must remain standard and operational.

TR 8.10.2	Rear Fog Light		
8.10.2.1	Both Rear Fog Lights must be 'EU' marked and functional at all times. Either one central light or two equally spaced lights must be used and these must be in accordance with K5.1		
TR 8.10.3	Batteries		
8.10.3.1	Batteries are free providing they are securely retained in the production location. The use of a ratchet strap or an additional mechanical fixing is mandatory.		
8.10.3.2	The Battery Earth (Ground) lead must be clearly identified with yellow covering (tape or sheath).		
8.10.3.3	The Battery Positive (Live) lead must be adequately insulated (not with tape).		
TR 8.10.4	Generators		
8.10.4.1	The complete charging circuits and all components must remain functional at all times. All modifications are prohibited.		
TR 8.10.5	Instrument Pack and Ancillaries		
8.10.5.1	The production instrument pack and upper centre console must remain and the instruments must be functional with the exception of the speedometer.		
8.10.5.2	The sensors and wiring harness required for any additional instruments must be separate, clearly defined and must not be spliced into any other wiring harness except as in TR 8.7.7.5.		
8.10.5.3	The inertia switch must be rendered inoperative.		
8.10.5.4	The standard wiring harnesses, their associated sensors and electronic control units must not be modified or added to but see TR 8.10.5.2. Replacement harnesses WZR/0001 may be fitted provided they are to this specification only.		
TR 8.11	BRAKES		
TR 8.11.1	Permitted Modifications		
8.11.1.1	Class B Mintex brake pads front and rear are mandatory.		
8.11.1.2	Metal braided jump hoses are recommended.		
8.11.1.3	The handbrake system MUST be retained.		
8.11.1.4	The ABS system may be removed, if so TR 8.11.1.5 is mandatory. If retained fixings and hard brake pipes may be replaced with modern day fixings and metal braided hoses and rear brake lines may be re-routed inside the car.		
8.11.1.5	The fitting of a cockpit sited adjustable Rear Brake Fluid Pressure Limiting Valve is allowed, as per class A		
TR 8.11.2	Prohibited Modifications		
8.11.2.1	Deleted now see 8.11.1.4		
8.11.2.2	Deleted now see 8.11.1.5		
TR 8.12	WHEELS/STEERING		
TR 8.12.1	Permitted Options		
8.12.1.1	The steering column lock assembly must be removed.		
8.12.1.2	16 inch wheels as originally supplied by MG Rover and fitted to MG ZR saloons are permitted. Wheels may be refurbished any colou provided all 4 wheels are the same.		
8.12.1.3	17" wheels may be used with wet tyres only.		
8.12.1.4	Power steering rack is mandatory and its fixation must remain standard.		
8.12.1.5	Wheel nuts should be tightened to 110N/m cold, 90N/m hot, do not overtorque with wheel nut gun.		
8.12.1.6	Front wheel spacers up to 10mm are permitted with the appropriate length wheel studs.		
TR 8.12.2	Prohibited Options		
8.12.2.1	The OEM steering wheel may NOT be changed.		

All modifications or additions except Parts detailed above are prohibited.

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8.12.2.2

- 8.12.2.3 Any modification to the road wheels is prohibited.
- 8.12.2.4 Construction and materials must remain as specified.

TR 8.13. TYRES

TR 8.13.1 Specifications

8.13.1.1 Dry - Dunlop Direzza 03G (DZ03G) size 205/50R16 H1. Tyres must at all times have a minimum tread depth of 2 mm across at least 80% of the tread width.

Wet - Any MSA List 1A tyre may be used size 205/40/R16 or 205/45/R16. When using 17'' wheels any MSA List 1A tyre may be used size 205/40/R17 or 205/45/R17. Tyres must at all times have a minimum tread depth of 2 mm across at least 80% of the tread width.

A maximum of 4 new dry tyres will be allowed for the first round entered and thereafter 1 additional new dry tyre per round will be allowed. Two new tyres may be used at Double Header meetings for the first race. A tyre check sheet will be issued to enable all competitors to keep a note of their tyre usage.

- 8.13.1.2 All treatment of the tyres is forbidden, e.g. chemical or thermal treatment including the use of heated tyre covers. The removal of rubber pick up is permitted. Pressure relief valves are not permitted.
- 8.13.1.3 I All directional tyres MUST be used the correct way around at all times.

TR 8.14 WEIGHTS

- 8.14.1 The minimum weight for the car is 1040 Kgs as the car finishes practice or the race with driver and helmet and remaining fuel.
- 8.14.2 Any additional ballast required to achieve this weight can be obtained from the MSA Eligibility Scrutineer and must be fitted in the front passenger seat area as specified using the MGCC approved fitting kit as stated in technical spec CZR/0002.
- 8.14.2 The weight established by weighing devices used by the MSA Eligibility Scrutineer or his deputy during scrutineering for an event is definitive.

TR 8.15 FUEL TANK/FUEL

- 8.15.1 The original MG Rover fuel tank must be retained. The original canister filter may be removed provided a non-vented filler cap with breather and roll over valve is fitted.
- 8.15.2 Only Pump Fuel (100RON max) available at roadside filling stations and to MSA Blue Book section "Nomenclature and Definitions (B)" may be used. No additives permitted.

TR 8.16. SILENCING

- 8.16.1 Refer to TR 8.7.6
- 8.16.2 At all times the noise level must respect MSA J 5.18, for testing, qualifying, practice or race. The maximum permitted level is 105 dB(A) measured at 0.5 meters from the main exhaust outlet at an angle of 45° at 3/4 maximum rpm.

TR 8.17 NUMBERS and CHAMPIONSHIP DECALS

8.17.1 Positions

- 8.17.1.1 All cars are to fit the MGCC competition panel decal to the door sill immediately behind the front wheel on both sides of the car. In addition windscreen headers, MGCC badges and front/rear Championship number plates are to be fitted in accordance with drawings which will be supplied. Space must also be left for race sponsor decals which will be fitted under the rubbing strip OR on the remaining area on each sill on both sides of the car. Any other mandatory sponsor decals will be provided and must be fitted as shown.
- 8.17.1.2 Advertising is allowed on the windscreen but it must not obscure the driver's vision. This will be limited to the championship windscreen header and one additional decal not exceeding 300mm x 90mm. The drivers name must be displayed on the rear side glass along the lower edge and may be displayed on the rear screen along the lower edge, see Q 19.2.2. The suggested font is Myriad Pro Bold, 50mm hight, colour white.
- 8.17.1.3 Competition numbers are to be located in accordance with Q11.4, 11.4.1 & 11.4.2

8.17.2 Suppliers

8.17.2.1 Decals will be provided free by the MGCC to all registered competitors. Replacements will be charged for.

SR6.1 Race Organising Clubs & Contacts

Championship Co-Ordinator,

Bruce Woods c/o MG Car Club Ltd Newbury Chantry Road, Chilworth

Guildford, Surrey. GU4 8LT Tel: 01483 504071

Mobile: 07836 358300 Email: Trophy@mgzrx.com

Motor Sports Association

Motor Sports House, Riverside Park Colnbrook Slough SL3 0HG Tel: 01753 765000 Fax:01753 682938 www.msauk.org

Dunlop Tyres Ltd

Michael Butler Tyrefort 88-98 Wingfoot Way Birmingham B24 9HY

Tel: 0121 306 6000 Mobile: 07836 721933

Gearbox Service

Dan Surridge CMC Motorsport Unit 17M MIRA Nuneaton Warwicks CV10 0TU

Tel: 07899 925454

Email: dansurridge@cmcmotorsport.co.uk

Roll Cage Manufacturers.

Safety Devices International Ltd 1 Enterprise Court Studlands Park Avenue Newmarket Suffolk CB8 7EP

Tel: 01638 560524

Email: motorsport@safetydevices.com

Finishline (UK) Ltd. (for Mintex and race consumables)

Chris Bray Jack's Hill Graveley Hitchin Herts SG4 7EQ

Tel: 01462 677112

 ${\bf Email: finishline@btconnect.com}$

R.T. Quaife Engineering Ltd.

Matt Weller Vestry Road Otford Sevenoaks Kent TN14 5EL

Tel: 01732 741144 Email: info@quaife.co.uk

The MG Car Club

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Email: mgcc@mgcc.co.uk

MSA Eligibility Scrutineer

Peter Elliott 147 Toft Hill Bishop Auckland Co Durham DL14 0JB

Tel: 01388 833778 Mobile: 07711 630707

Email: peterselliott@yahoo.co.uk

HP Tyre Exchange

John Pearson/Steve Cox Units 5 / 6, Broadmarch Trade Park Long March Industrial Estate Daventry, Northants. NN11 4HE Tel: 01327 301887

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Janspeed Engineering

Mark Vaughan Castle Works Castle Road Salisbury Wiltshire SP1 3RX

Tel: 01722 321833 Email: info@janspeed.com

Brown & Gammons Ltd. (for Roll Cages, Mintex and race spares)

Malcolm Gammons 18 High Street Baldock Herts SG7 6AS

Tel: 01462 490049

Email: malcolm@ukmgparts.com

K Maps

Mark Stacey 9 Ladbroke Hall Ladbroke Southam Warks CV47 2DF

Tel: 07928 196856

Email: kmaps.enquiry@gmail.com

SR6.2 COMMERCIAL UNDERTAKINGS

The following Commercial Undertakings are "contractural" between the Entrant and/or Driver and the Organisers and/or Promoters and are not considered by MSA. Accordingly the application of these Commercial regulations by the Organisers and/or promoters will not be subject to the Judicial procedures of either the Championship Stewards and/or the MSA/ MSC.

- 6.2.1 The Championship title and associated logo styles may only be used with the prior written approval of the Organisers.
- 6.2.2 Competitors are advised that, unless requested otherwise, their information will be stored in a computer retrieval system and may be used for publicity purposes.
- 6.2.3 Entry into the Championship is conditional upon each Competitor: Providing free of charge to the Organisers advertising places on their cars as specified in these regulations or subsequent bulletins: Accepting without reservation or recourse the surrender of his/her rights (if any) for TV filming and broadcast of footage collated during the series which may be used at the Championship Organisers' and Sponsors' discretion.
- 6.2.4 No tobacco (or associated products) related advertising is permitted in any form in this Championship. Additionally, any products that are not permitted to be advertised on European Union terrestrial television stations are also prohibited.
- 6.2.5 No advertising or statement on the car or on Drivers' race clothing is allowed which may be considered unsuitable or offensive to the Organisers or their sponsors.
- 6.2.6 All Drivers required for Podium Presentations at the end of each race or meeting should attend without delay. Failure to do so may mean forfeiting any Championship Awards/points gained at that round.
- 6.2.7 Drivers must attend the end of season Awards Ceremony in order to formally claim their awards. Non-attendance may mean forfeiture of awards unless previously agreed with the Organisers.
- 6.2.8 Engine and gearbox replacements, rebuilds and ratings are subject to agreement with the MSA Eligibility Scrutineer. No Competitor may have more than one spare sealed engine and/or gearbox/transmission unit in his possession at any one time. All engines and gearboxes returned for rebuilds etc. must be returned with identification tags and all seals intact.
- 6.2.9 The Organisers will decline to accept entries from any competitor who is in dispute with any supplier associated with the Championship over the settlement of accounts for parts or services.

SR6.3 Trade Support Vehicle Decals & Overall Patches

For vehicle decals:

Graham Ross Write on Sign & Display Kilda Road Perth PH1 3FL

Tel: 01738 630007

Email: graham@write-on-signs.com

SR6.4 Promotional Activities

MG Trophy PR

Pete Macwaters 5 New College Court Chackmore Bucks MK18 5JP

Tel: 01280 821442

Email: pmacwaters@gmail.com

SR7 Registration Form

Please apply to: Bruce Woods Newbury Chantry Road Chilworth Guildford Surrey GU4 8LT

Tel: 07836 358300 Email: <u>Trophy@mgzrx.com</u>