



THE DRAYTON MANOR PARK MG METRO CUP

The Only Racing Championship Dedicated to the Metro



2010 SPORTING and TECHNICAL REGULATIONS



**THE
DRAYTON MANOR PARK
MG METRO CUP**

2010

**SPORTING
and
TECHNICAL
REGULATIONS**

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Changes from 2009 Championship Regulations shown **underlined,**
in red and in italics

REGISTRATION FORM

Please post the completed registration form and the £25.00 registration fee with a cheque made payable to: 'MG Car Club Metro Championship' to : -

**Mark Bellamy
Madat House, Elsthorpe Road
Stainfield, Nr Bourne
Lincolnshire PE10 0RS**

NOTES

Technical Advisor

Paul Ashton - (A-Series) e-mail paulashton179@tiscali.co.uk
61 Skye Crescent, Newton Leys, Bletchley, Milton Keynes, MK3 5AY
Telephone 07742 149829 (mobile) 01908 374649 (home)

K-Series Representative

Nick Isaac e-mail nickgemisaac@aol.com
33 North Road, Earls Barton, Northants, NN6 0LP
Telephone 07505 738235 (mobile) 01604 813535 (home)

MSA Eligibility Scrutineer

Steve Prior e-mail priorsteve@hotmail.com
63 Glebe Road, Deanshanger, Milton Keynes MK19 6LS
Telephone 07763 824161 (mobile) 01908 562647 (home)

MG Car Club

Steve Carr, The MG Car Club Ltd, PO Box 251, Abingdon, Oxfordshire.
OX14 1FF Telephone 01235 555552 Fax 01235 533755

Motor Sports Association (MSA)

Motor Sports House, Riverside Park, Colnbrook, Slough, SL3 0HG
Telephone 01753 681736

6.2 COMMERCIAL UNDERTAKINGS

- 6.2.1 Trade Support Vehicle Decals & Overall Patches: not applicable.
- 6.2.2 Promotional Activities: not applicable.

The Drayton Manor Park MG Metro Cup

in Association with the MG Car Club Limited

SPORTING REGULATIONS

SPORTING REGULATIONS – GENERAL

1.1 TITLE AND JURISDICTION

- 1.1.1 The Drayton Manor Park MG Metro Cup is organised and administered by the MG Car Club Limited 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.
- 1.1.2 MSA Championship Permit No. 2010/085
- 1.1.3 Race Status: National B
- 1.1.4 MSA Championship Grade: Category C

1.2 OFFICIALS

- 1.2.1 Co-ordinator: Jean Ellis
- 1.2.2 Licensed MSA Eligibility Scrutineer: Steve Prior
- 1.2.3 Championship Stewards: Douglas Samuel
Kevin Pateman
Rob Gammage

1.3 COMPETITOR ELIGIBILITY

- 1.3.1 Entrants must be fully paid up valid membership card holding members of the MG Car Club Limited and in possession of a valid 2010 MSA Entrants Licence.
- 1.3.2 Drivers and Entrant/Drivers must be fully paid up valid membership card holding members of the MG Car Club Limited, be registered for the Championship and be in possession of a valid MSA Competition Licence (Racing) of at least National B Status.
If participation in the Championship requires absence from school, Drivers in full time school education are required to have the approval of their head teacher and a letter stating such approval from his/her school in order to fulfil registration for the Championship.
- 1.3.3 All necessary documentation must be presented for checking at all rounds when signing-on.

1.4 REGISTRATION

- 1.4.1 All drivers must register as competitors for the Championship by returning the Registration Form with the Registration Fee to the Co-ordinator prior to the Final Closing date for the first round being entered.
- 1.4.2 The Registration Fee is £25.00 - Made payable to:- MG Car Club Metro Championship.

1.4.3 Registrations will be accepted from 1st January 2010 until 31st December 2010.

1.4.4 Registration numbers will be the permanent Competition numbers for the championship.

1.5 CHAMPIONSHIP ROUNDS

1.5.1 The Championship will be contested over a maximum of 10 rounds as follows:

10-11/04/2010 Brands Hatch MGCC double header
08/05/2010 Oulton Park MGCC
5-6/06/2010 Silverstone GP MGCC double header
31/07/2010 Castle Combe CCRC
4-5/09/2010 Cadwell Park MGCC double header
02-03/10/2010 Snetterton MGCC

20/11/2010 Dinner Drayton Manor
21/11/2010 Drivers meeting Drayton Manor

1.6 SCORING

1.6.1 Points will be awarded to Competitors listed as classified finishers in the Final Results (in each class) as follows:

1st 10 points	2nd 8 points
3rd 7 points	4th 6 points
5th 5 points	6th 4 points
7th 3 points	8th 2 points
	9th 1 point

If 3 or less cars start in any class the scoring will be 8-6-5.

One additional point will be awarded to each Competitor setting or equalling the race fastest lap in each class, where the race is timed. One additional point will be awarded to each Competitor practicing for, or starting a race.

1.6.2 The points from the total number of qualifying rounds less one will determine final Championship positions.

1.6.3 Ties shall be resolved using the formula in Q3.4 in the 2010 MSA Yearbook.

1.7 AWARDS

1.7.1 All awards are to be provided by the Race Organising Club.

1.7.2 Per Round: An award for 1st, 2nd and 3rd in each class subject to 3, 5 and 7 starters in each class respectively.

1.7.3 To accrue Championship points or any form of recognition towards an award or title any organisation, team, company, sponsor or person must be in possession of a valid Entrants licence.

1.7.4 Championship: The following awards are presented annually:
Overall - Bourne Contract Support Services Ltd Trophy - held one year
Best Performance in a Rover K-Series - Drayton Manor Park Trophy - held one year

5.17.2 SUPPLIERS

Championship decals, coloured class letters, MG Car Club stickers and web site decals will be provided by the organisers. Competitors will provide their own number panels and competition numbers.

6. APPENDICES

6.1 RACE ORGANISING CLUBS & CONTACTS

The following Commercial Undertakings are not subject to the Judicial procedures of either the Championship Stewards and/or the MSA/MSA.

6.1.1 CHAMPIONSHIP COMMITTEE

**Drayton Manor Park MG Metro Cup Web Site -
www.mgmetrocup.co.uk**

Honorary President/Chairman

Steve Hall e-mail steve@hallsgarage.co.uk
Brooklands, 94 Station Street, Ripplingale, Nr Bourne, Lincs. PE10 0TA
Telephone 01778 440619 (evening) 01778 570286 (day)

Co-ordinator

Jean Ellis e-mail JeanEllisMG@hotmail.co.uk
Goodwood, Green Lane, Woodhall Spa, Lincolnshire. LN10 6QE
Telephone & Fax 01526 354052

Registrar

Mark Bellamy e-mail markwbellamy@btinternet.com
Madat House, Elsthorpe Road, Stainfield, Nr Bourne, Lincolnshire. PE10 0RS
Telephone 01778 570262

Treasurer

Peter Ellis e-mail peterrellis@msn.com
Goodwood, Green Lane, Woodhall Spa, Lincolnshire. LN10 6QE
Telephone & Fax 01526 354052

Marketing and Webmaster

David Heasman e-mail mgracing@thewholesaler.co.uk
10 Queens Avenue, Shipston on Stour, Warwickshire. CV36 4DE
Telephone 01608 666160 07917 007173 (mobile)

MG Metro (all) - To prevent spillage, modification of the standard production fuel tank filler neck is permitted.

MG ZR 105/Rover 200/25 - A non-vented filler cap with breather and roll over valve is mandatory.

5.15.2 LOCATIONS

Metro - Relocation of the fuel tank, respecting MSA Regulation [J5.13](#) (Fuel Systems) is allowed.

Where fitted, the rubber fuel tank breather pipe in the off side inner wing area must be replaced with a continuous length of metal pipe throughout the passenger compartment and must be connected to the breather neck with a metal braided hose.

MG ZR 105/Rover 200/25 - The original MG Rover fuel tank must remain but may be baffled or foam filled.

5.15.3 FUEL

Standard pump fuel (in accordance with MSA Regulation [B](#)) only is allowed.

Octane Boosters of any form are forbidden.

Metro (all) - Millers CVL fuel lead additive is permitted.

5.16 SILENCING

5.16.1 SPECIFICATION

Silencing is mandatory for all cars in accordance with MSA Regulation [J5.17](#). At all times circuit noise restrictions MUST be respected.

5.17 NUMBERS and CHAMPIONSHIP DECALS

5.17.1 POSITIONS

Competing cars must carry numbers on both sides and front of the vehicle, in accordance with MSA Regulation [J4.1](#). The two side number panels must be placed in the prescribed positions on both doors and not on a combination of both door and front or rear panel. Championship decals 'Drayton Manor Park MG Metro Cup' must be positioned across the top of each number panel, across the top of the windscreen *and across the rear hatch below the window*. The driver's name may be displayed on the rear side and/or the rear screen in letters not exceeding 10 cm high. MG Car Club stickers must be displayed on all cars and if not applied to the bodywork, these may be displayed on the rear side windows. Also see MSA Regulation [Q19.2.2](#) which prohibits advertising on other transparent surfaces). *Coloured* class letters must be positioned on the right hand lower side of each number panel. Web site decals must be displayed in a prominent position on the front & rear bodywork or bumpers of the vehicle.

Competitors failing to display Championship decals, class letters or web site decals as specified will not be eligible for points in the Championship.

Class A - MG Car Club Front Wheel Drive Register Trophy - held one year

Class B - MG Enthusiast Magazine Trophy - held one year

Class B Turbo - Drayton Manor Park Trophy - held one year

Class C - Rover Sport/BRDC Trophy - held one year

Class A Novice - Avonbar Plate - held one year

Class B Novice - Avonbar Plate - held one year

Class C Novice - Unipart Plate - held one year

Hardest Trier/Least Result - Gowood Motors Broken Piston Award - held one year

Spirit of the Championship - C W Hall Memorial Trophy - held one year

Driver's Driver Award - The Peter Foster Trophy - held one year

Best Presented Car - The MG Car Club FWD Trophy - held one year

Best Performance by a Double Entry - The John Rushby Memorial Trophy - held one year

League Trophy - Hooton Road Service Station Trophy - held one year

Classes A, B and C - An award for 2nd and 3rd in class subject to entries

A Competitor may win more than one major award.

All trophies will be presented to drivers and not entrants.

Bonuses:

Per Round: None

Championship: Subject to Sponsorship, the Championship may make an end of season partial refund of race entry fees. Any refund will be distributed to all Competitors who have produced the necessary documentation to prove eligibility for the Championship and will be paid to each Competitor for every race started.

Presentations:

Garlands and Trophies are to be provided for presentation by the race organising club at the end of each race or at an end of the meeting presentation ceremony. Prize money and Bonuses - n/a.

Entertainment Tax Liability:

In accordance with current government legislation, the Championship is legally obliged to withhold tax at the basic rate on all payments to non-UK resident 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 Championship 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

1.7.5

1.7.6

1.7.7

made in writing and not later than 30 days before the payment is due. For further information contact:- The Inland Revenue, Foreign Entertainers Unit, Centre for Non-Residents, St John's House, Merton Road, Merseyside L69 9BB. Tel 0151 472 6488, Fax 0151 472 6483.

1.7.8

Title to all Trophies:

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

2 SPORTING REGULATIONS - JUDICIAL PROCEDURES

2.1. **ROUNDS:** In accordance with Section C of the 2010 MSA Yearbook and the Championship Regulations.

2.2. **CHAMPIONSHIP:** In accordance with Section C of the 2010 MSA Yearbook and the Championship Regulations.

3. SPORTING REGULATIONS - CHAMPIONSHIP RACE MEETINGS & RACE PROCEDURES

3.1 ENTRIES

3.1.1 Competitors are responsible for sending in correct and complete entries with the correct entry fees prior to the entry closing dates which shall be stated in the Supplementary Regulations for the event.

3.1.2 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.

3.1.3 Any withdrawal of Entry or Driver/Car changes made after acceptance of any entry must be notified to the Secretary of the Meeting in writing. If Driver/Vehicle changes are made after publication of Entry Lists with Final Instructions the Competitor concerned must apply for approval of acceptance by the Stewards of the Meeting BEFORE Signing-On.

3.1.4 The Maximum Entry Fee for each event will be as specified in the Supplementary Regulations.

3.1.5 In the event of any rounds being oversubscribed, the Organising Clubs may at their discretion run Qualification Races. For Qualification Race Procedures see 3.13 of these Regulations.

3.1.6 Reserves are to be nominated on the Final List of Entries published with Final Instructions or Amendment Sheet Bulletins. All Reserves will practice and replace withdrawn or retired entries in Reserve Number order irrespective of class. If Reserves are given Grid Places prior to issue of the first Grid Sheets for any

Class/Vehicle/List	Rim Dia.	Tyre Width	Aspect Ratio
Class A MG Metro List 1A	12"	165	60
Class A Rover Metro/100 List 1A	13"	175 to 185	50 to 60
Class A MG ZR 105 etc List 1A	14" to 17"	205 max.	45 min
Class B Modified MG Metro List 1A/1B	13"	175 to 185	50 to 60
Class B MG Metro Turbo List 1A/1B	13"	175 to 185	50 to 60
Class B Rover Metro/100 8 valve List 1A/1B	13"	175 to 185	50 to 60
Class B Rover Metro/100 16 valve List 1A	13"	175 to 185	50 to 60
Class C MG Metro Turbo List 1A/1B	13"	175 to 185	50 to 60
Class C MG Metro 1380cc List 1A/1B	13"	175 to 185	50 to 60
Class C Rover Metro/100 List 1A/1B	13"	175 to 185	50 to 60
Class D Metro List 1A	13"		

5.13.2 NOMINATED MANUFACTURERS

Any make of tyre may be used.

5.14 WEIGHTS

It is permitted to achieve the specified minimum weight of car plus driver by means of ballasts which must not exceed 20Kg and can only be located in the passenger seat area. This weight will be reviewed annually. Any ballast must be a maximum of two blocks, which must each be secured by four bolts of at least 8 mm diameter with secured plates of at least 400 sq mm surface area beneath the body shell. The bolt above the nut must be drilled for sealing by the scrutineer with wire and seals.

The weight established by the weighing device used by the Technical Commissioner/Scrutineer for an event is definitive.

The minimum weight for each Class must be maintained throughout practice and race at each event.

Class A and Class B MG Metro, Class C MG Metro Turbo and All Rover Metro/100 - Minimum car weight, plus driver and helmet, including ballast 825Kg

Class C MG Metro 1380cc - Minimum car weight, plus driver and helmet, including ballast 865Kg. This weight will be reviewed and amended by Technical Bulletin as necessary.

MG ZR 105/Rover 200/25 - Minimum car weight, plus driver and helmet, including ballast 1050Kg.

5.15 FUEL TANK/FUEL

5.15.1 TYPES

Any type of fuel tank may be used, including foam filled or alloy.

Anti-surge petrol tank pick-up pipes and baffles are permitted

Fuel tank breather pipes must exit centrally between the rear wheels or behind the rear wheels.

The correct filler cap must be fitted if the standard production filler neck is retained.

MG Metro (all) - Front brake ducting is not permitted unless the MG Metro Turbo front spoiler is fitted.

Class A and B Metro (all) - Rear brake pressure limiters/bias controls are not permitted.

Class C Metro (all) - Rear brake pressure limiters/bias controls must either be locked, totally out of reach of the driver or covered during racing.

MG ZR 105/Rover 200/25 - Vented, cross drilled and/or grooved discs are not permitted. Rear discs and aluminium rear brake drums are prohibited.

5.12 WHEELS/STEERING

MG ZR 105/Rover 200/25 - Power steering may be disabled.

5.12.1 PERMITTED MODIFICATIONS

Spare wheel may be removed.

Steering wheel may be of any type or manufacturer, but must conform to MSA Regulation [15.7](#).

Steering column may be lowered providing a universal coupling is used between the column and rack.

Class A MG Metro, Class A Rover Metro/100 and MG ZR 105/Rover 200/25 - Must retain standard production rack in standard location.

Other Classes - A quick rack is permitted.

5.12.2 PROHIBITED MODIFICATION

Wheel spacers are not permitted.

5.12.3 CONSTRUCTION & MATERIALS

MG Metro (all) - Any standard production MG Metro alloy wheel is permitted.

Class B and C MG Metro (all) - Alternatively road wheels Ronal/Mono FQ are permitted.

Rover Metro/100 (all) - Any standard production Rover Metro/100 alloy wheel is permitted.

MG ZR 105/Rover 200/25 - Only standard production alloy or steel MG ZR 105/Rover 200/25 wheels as supplied by MG Rover are permitted.

5.12.4 DIMENSIONS

Class A MG Metro - Up to a maximum size of 5" x 12".

Class B and C MG Metro (all) - Up to a maximum size of 5.5" x 13".

Rover Metro/100 (all) - Up to a maximum size of 5.5" x 13".

MG ZR 105/Rover 200/25 - Up to a maximum size of 6.5" x 17".

5.13 TYRES

5.13.1 SPECIFICATIONS

Only road going tyres approved in MSA Regulations [L4](#) (List 1A) and/or [L5](#) (list 1B) are permitted as follows: -

round, the times set in Practice shall determine their grid positions. If Reserves are given places after publication of the Grid Sheet and prior to cars being collected in the Official "Assembly Areas", they will be placed at the rear of the Grid and be started without any time delay. Otherwise, they will be held in the Pit lane and be released to start the race after the last car to start the GREEN FLAG LAP or last car to take the start has passed the start line or pit lane exit, whichever is the later. Such approval to start MUST be obtained from the Clerk of the Course.

3.2 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.

3.3 PRACTICE

The minimum period of practice will be specified in the Supplementary Regulations. Should any Practice Session be disrupted, the Clerk of the Course shall not be obliged to resume the session or re-run sessions to achieve the championship criteria and the decision of the Clerk of the Course shall be final.

3.4 QUALIFICATION

Each driver should complete a minimum of 3 laps practice in the car to be raced and in the correct session in order to qualify for selection and order of precedence as set out in the MSA Regulation [Q4.5](#). The Clerk of the Course and/or Stewards of the Meeting shall have the right to exclude any driver whose practice times or driving are considered to be unsatisfactory - as per MSA Regulation [Q4.5](#).

Where a single practice session is held for both rounds of a double header (see 1.5) starting positions for the second part will be determined by the finishing order in the first part.

3.5 RACES

The standard minimum scheduled distance shall be as stated in the Organising Clubs' Supplementary Regulations whenever practicable but should any race distance be reduced at the discretion of the Clerk of the Course or Stewards of the Meeting it shall still count as a full points scoring round.

3.6 STARTS

3.6.1

All race start countdowns are to have a minimum elapsed period of 3 minutes from the time all cars are released to form up on the grid to the start of the Green Flag Lap(s) in the formation as specified on the Track Licence for each circuit.

- 3.6.2 The minimum countdown procedures/audible warnings sequence shall be: -
1 minute to start of the Green Flag Lap, Start Engines/Clear Grid.
30 Seconds – Visible and audible warning for start of the Green Flag Lap/Pace Lap.
- 3.6.3 The use of tyre heating/heat retention devices, tyre treatments and compounds is prohibited.
- 3.6.4 Any cars 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 to take the start from the grid has passed the start line or pit lane exit, whichever is the later.
- 3.6.5 Any drivers unable to start the Green Flag Lap or start are required to indicate their situation as per MSA Regulation [Q12.13.2](#) and any drivers 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.
- 3.6.6 Excessive weaving to warm-up tyres - using more than 50% of the track width, and falling back in order to accelerate and practice starts is prohibited.
- 3.6.7 A five second board will be used to indicate that the grid is complete. The red lights will be switched on five seconds after the board is withdrawn. In the event of any starting lights failure the Starter will revert to use of the National Flag.

3.7 RACE STOPS

- 3.7.1 Should the need arise to stop any race or practice, RED LIGHTS will be switched on at the Startline and RED FLAGS will be displayed at the Startline and at all Marshals Signalling Points around the Circuit.
This is the signal for all drivers to cease circulating at racing speeds, to slow to a safe and reasonable pace and to return to the starting grid area which will automatically become a Parc Ferme area.
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.
- 3.7.2 Case A – Less than two laps completed by Race Leader.
The Race will be null and void. The race will restart from the original grid positions. Competitors unable to take the restart may be replaced by reserves who will start from the back of the grid in reserve order. Gaps on the grid should not be closed up. The length of the restarted race will be determined by the Clerk of the Course.
- 3.7.3 Case B – More than two laps completed by Race Leader but less than 75%.
The Race will restart from a grid set out by the finishing order of

curely enclosed within a securely mounted, sealed container of non-conductive material.

MG ZR 105/Rover 200/25 - The battery to earth lead must be clearly identified with yellow tape in accordance with MSA Regulation [J5.14.5](#).

5.10.4 GENERATORS

An alternator shall be fitted and be fully operational at all times. Pulley may be of any diameter.

MG ZR 105/Rover 200/25 - The complete charging circuits and all components must remain functional at all times. All modifications are prohibited.

5.11 BRAKES

The hand brake must be in efficient working order on both rear wheels at all times.

MG ZR 105/Rover 200/25 - Only the non-vented disc/drum brake set up is allowed.

5.11.1 PERMITTED MODIFICATIONS

Brake pads/shoes must retain standard shape but friction material is free.

Rear brake drums may be any MG Metro, Rover Metro or Rover 100 production component.

Front dust shields may be modified or removed to aid cooling.

Braided brake lines may be fitted.

Modification to the brake master cylinder reservoir(s) to prevent fluid surge is permitted.

Master cylinders are unrestricted but must be a dual circuit type operated by the same pedal.

The Servo type may be of any type or manufacturer and may be removed or operate front circuit only.

Class A (all) - Vehicles must retain standard master brake cylinder/servo unit and dual circuit braking.

MG Metro (all) - Any standard production MG Metro or MG Metro Turbo brake disc/caliper is permitted.

Class C MG Metro Turbo and **Class C MG Metro 1380cc** - Ventilated standard production MG Metro Turbo brake disc/caliper are mandatory.

Class B Modified MG Metro, Class C MG Metro Turbo, Class C MG Metro 1380cc, Class B Rover Metro/100 and **Class C Rover Metro/100** - Any standard production Rover Metro/100 brake disc/caliper is permitted for.

It is permitted to fit internally mounted rear brake pressure limiters/bias controls and to route brake lines through the vehicle.

MG ZR 105/Rover 200/25 - Brake pads/shoes must retain standard shape but friction material is free. Front dust shields may be modified or removed to aid cooling. Metal braided brake hoses are mandatory.

5.11.2 PROHIBITED MODIFICATIONS

Cross drilled and/or grooved discs are not permitted.

Aluminium rear brake drums are not permitted.

with final drives 3.556 [64/18 teeth] (GTa 8v) or 3.765 [64/17 teeth] (GTa/ GTi 16v). The 5 speed gearbox may be the standard production Rover Metro/100 R65 unit (bonded crownwheel) or a later R65U unit (bolted crownwheel).

Class C Rover Metro/100 - Fitted with a limited slip differential and the 5 speed gearbox then alternative final drive ratio 4.2857 [60/14 teeth] is also permitted.

MG ZR 105/Rover 200/25 - These must be to the manufacturers standard production specifications. Either the standard 5 speed R65 (PSA MA) with internal ratios 1st 3.417/ 2nd 1.947/ 3rd 1.333/ 4th 1.054/ 5th 0.854 with final drive 3.938:1 or the standard 5 speed IB5 (Ford/Getrag) with internal ratios 1st 3.583/ 2nd 2.038/ 3rd 1.414/ 4th 1.108/ 5th 0.878 with final drive 3.824:1 is mandatory. (note that the IB5 is not as strong as the R65)

5.10 ELECTRICS

MG ZR 105/Rover 200/25 - The use of any type of data acquisition or data logging system is only permitted if the data can only be downloaded after the race is over (ie no radio transmission). Any electrical or mechanical inputs, probes, sensors or transducers are to be removed or disconnected during an official timed qualification session or race. Under no circumstances may any probes, sensors or transducers relating to any type of data acquisition or data logging system be connected into the engine or chassis wiring looms. The inertia switch must be rendered inoperative

5.10.1 EXTERIOR LIGHTING

Headlights must be adequately protected against breakage (MSA Regulation [Q19.14.4](#)) ideally with clear vinyl and must be in place and operational.

Stop/tail lights and indicators must be operational and visible at all times.

MG ZR 105/Rover 200/25 - The production headlight assemblies must remain standard and operational. Plastic headlight lenses do not need additional protection. MSA Regulation [Q19.14.4](#).

5.10.2 REAR FOG LIGHT

Metro - rear fog lights may be removed, but refer to 5.3 Safety Requirements.

MG ZR 105/Rover 200/25 - Both Rear Fog Lights must be functional at all times.

5.10.3 BATTERIES

The battery to earth lead must be clearly identified with yellow tape in accordance with MSA Regulation [J5.14.5](#).

Class A MG Metro, Class B MG Metro Turbo, Class A Rover Metro/100 and MG ZR 105/Rover 200/25 - The battery may be replaced by any type or make but must remain in original position.

Other Classes - The battery may be re-located in the front passenger seat area. In such cases the battery, irrespective of type or make, must be se-

part one, (as per [Q5.4.3](#)). The result of the race will be the aggregated results of the two (or more) sections of the race. The length of the restarted race will be determined by the Clerk of the Course.

3.7.4 If the leader has completed more than 75% of the race distance or duration it shall not be re-started and the results will be declared in accordance with MSA Regulation [Q5.4.3](#), unless the Clerk of the Course, in consultation with the Stewards deem it appropriate to restart the race.

3.8 RE-SCRUTINY

All vehicles reported involved in contact incidents during races or practice must be re-presented to the Scrutineers before continuing in the races or practice.

3.9 PITS AND PITLANE SAFETY

3.9.1 Pits - Entrants must ensure that the MSA, Circuit Management and Organising Club Safety Regulations are complied with at all times.

3.9.2 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 drive at minimum speeds in pit lanes.

3.9.3 Refuelling - May only be carried out in accordance with MSA Regulations [Q13](#), Circuit Management Regulations and the SRs or Final Instructions issued for each Circuit/Meeting.

3.9.4 Speed Limit in the Pit Lane will be as specified by the Race Organising Club or Circuit Management.

3.10 RACE FINISHES

After taking the Chequered Flag drivers are required to: Progressively and safely slow down, remain behind any competitors ahead of them, return to the Pit lane Entrance/Paddock Entrance as instructed, comply with any directions given by Marshals or Officials and to keep their helmets on and harnesses done up while on the circuit or in the pit lane.

3.11 RESULTS

All Practice Timesheets, Grids and 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.

3.12 TIMING MODULES

All cars must be fitted with transponders complying with the requirements of [race organising club](#).

3.13 QUALIFICATION RACES

If applicable details will be given in the Supplementary Regulations for the Meeting.

3.14 OPERATION OF SAFETY CAR

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

4. CHAMPIONSHIP RACE PENALTIES

4.1 INFRINGEMENTS OF TECHNICAL REGULATIONS

4.1.1 Arising from post practice Scrutineering or Judicial Action: Minimum Penalty - The provisions of MSA Regulation [C3.3](#).

4.1.2 Arising from post race Scrutineering or Judicial Action: Minimum Penalty - The provisions of MSA Regulation [C3.5.1](#) (a) and (b). For infringements deemed to be of a more serious nature the Clerk of the Course and/or Stewards of the Meeting are to invoke the provisions of Regulation [C3.5.1](#) (c).

4.1.3 Additional specific championship penalties:
Any Competitor who, in the opinion of the Championship Stewards, is guilty of conduct which is contrary to the interests of the Championship and/or Sponsor or which is likely to bring the Championship and/or Sponsor into disrepute, may be barred from competing in one or more rounds of the Championship and/or may have up to ten points deducted from their points total. This rule will apply to conduct both on and off the circuit and will cover Competitors actions when dealing with event organisers, officials and marshals as well as when dealing with fellow Competitors.

4.2 INFRINGEMENTS OF NON-TECHNICAL MSA REGULATIONS AND THE SPORTING REGULATIONS ISSUED FOR THE CHAMPIONSHIP

As per the [2010](#) MSA Judicial Procedure Regulations.

drilled for cooling purposes.

Class C MG Metro Turbo and **Class C MG Metro 1380cc** - Close ratio straight cut gears are permitted. Synchromesh cones are unrestricted.

Dog engagement gears may be used. A limited slip differential is permitted. It is permitted to machine the gearbox casing in order to fit the limited slip differential. Uprated drive shafts are permitted.

Class B Rover Metro/100 and **Class C Rover Metro/100** - The clutch and flywheel may be from any production Rover K series vehicle. Minimal modifications to the flywheel to fit an alternative clutch unit are permitted. Minimum flywheel weight 6.5Kg.

Class C Rover Metro/100 - A limited slip differential and paddle clutch plate are permitted.

MG ZR 105/Rover 200/25 - none.

5.9.2 PROHIBITED MODIFICATIONS

Non-standard gearboxes are prohibited, except where stated otherwise. Straight cut or close ratio gears are not allowed, except where stated otherwise.

Limited slip differentials, locked or Power Locked differentials are not allowed, except where stated otherwise.

Class A MG Metro - Lightening of the standard clutch assembly is prohibited.

MG Metro (all) - It is prohibited to lighten the standard production cast iron flywheel and/or pressure plate.

MG Metro (all) - 5 or 6 speed gearboxes are prohibited.

Rover Metro/100 (all) - 6 speed gearboxes are prohibited.

MG ZR 105/Rover 200/25 - Anything not stated.

5.9.3 TRANSMISSION & DRIVE RATIOS

Class A MG Metro, Class B MG Metro Turbo and **Class B Modified MG Metro** - The standard production helical gears, gearbox ratios and transfer gear ratios must remain.

Class A MG Metro - Standard production MG Metro final drive ratio must remain (3.44:1) [62/18 teeth].

Class B MG Metro Turbo and **Class B Modified MG Metro** - Only 3.44:1, 3.7:1 or 3.9:1 [55/14 teeth] final drive ratios are permitted.

Class C MG Metro Turbo and **Class C MG Metro 1380cc** - Gearbox ratios for 1st, 2nd and 3rd are free, 4th to be 1:1. Any drop gear ratio between 1:1 and 1.09:1 is permitted. Only 3.9:1 [55/14 teeth] final drive ratio is permitted.

Class A Rover Metro - The standard 5 speed R65 production gearbox with internal ratios 1st 3.417/ 2nd 1.947/ 3rd 1.333/ 4th 1.054/ 5th 0.854 with final drive 3.556:1 is mandatory.

Class B Rover Metro/100 and **Class C Rover Metro/100** - The gearbox can be any production R65 Rover unit with ratios: - 4 speed 1st 3.417/ 2nd 1.80/3rd 1.138/4th 0.810 with final drive 4.063:1 [65/16 teeth] or 5 speed 1st 3.417/ 2nd 1.947/ 3rd 1.333/ 4th 1.054/ 5th 0.854

lower wishbones part numbers MGF 403S (RH) & MGF 434S (LH) and/or lower front suspension ball joints MGF 449S (RH) & MGF 448S (LH).

Class C (all) - It is permitted to fix shock absorbers to the rear suspension in the vertical plane, one each side.

MG ZR 105/Rover 200/25 – *Adjustable* shock absorbers *are permitted* and springs *are free*. Adjustable top suspension mounts are permitted. Either ZR or R200/R25 front tie rods may be used (ZR give more castor angle).

5.8.2 PROHIBITED MODIFICATIONS

Wheel spacers are not permitted.

Coil over shock absorbers or shock absorbers with remote reservoirs are not permitted.

Metro (all) - The front anti-roll bar must be a single unit. Rear anti-roll bars may not be adjusted within the cockpit.

Modifications to the front hubs or front suspension ball joints are not permitted, except where stated otherwise.

MG ZR 105/Rover 200/25 - Rear anti roll bars are prohibited for MG ZR and Rover 25 (Some older Rover 200 models had less substantial rear sub frames with rear anti roll bars which, if original, are permitted).

5.8.3 WHEELBASE/TRACK

The wheelbase and track is to remain standard, subject to agreed modifications.

Metro (All) - The maximum negative camber allowed at the front is 3 degrees.

Class A (all) - Front castor and front tracking settings are free. Rear camber and rear tracking settings must be within the standard production tolerances.

Class B (all) and **Class C (all)** - Front castor, rear camber and front/rear tracking settings are free.

MG ZR 105/Rover 200/25 - The maximum negative camber allowed at the front is 2 degrees.

5.9 TRANSMISSIONS

These must be to the manufacturers standard production specifications, with the following permitted/prohibited modifications.

5.9.1 PERMITTED MODIFICATIONS

Quick-shift gear changes are permitted.

Class A, Class B and Class C MG Metro (all) - A lightened steel flywheel and an uprated clutch assembly are permitted.

Transmission bearings and bushes may be of any type or manufacturer. A modified and relocated oil pick-up is permitted including a magnet. The speedometer drive may be disconnected. It is permitted to modify the shape of the gear lever. The gearbox lever assembly may be located within the cockpit, however, the floor/bulkhead must always be a closed firewall. A twin cross pin differential may be fitted. The clutch housing cover may be

The Drayton Manor Park MG Metro Cup

in Association with the MG Car Club Limited

TECHNICAL REGULATIONS

5. TECHNICAL REGULATIONS – A SERIES MG METRO & K SERIES ROVER METRO/ROVER 100/MG ZR/ROVER 200/25

5.1 INTRODUCTION

The following Technical Regulations 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 SHOULD WORK ON THE PRINCIPLE THAT YOU CANNOT.

5.2 GENERAL DESCRIPTION

The Drayton Manor Park MG Metro Cup Championship is for Competitors participating in MG Metro, MG Metro Turbo, Three Door Rover GTa and GTi Metros, Rover 100s and MG ZR 105 and the equivalent Rover 200/25 and is organised in four classes as below.

- Class A** - Standard MG Metro.
Rover Metro GTa 8 Valve 1400cc K Series Carburettor Version.
MG ZR 105/Rover 200/25.
- Class B** - Modified MG Metro and Standard MG Metro Turbo.
Rover Metro/100 vehicles fitted with 8 Valve 1400cc Fuel Injected K Series.
Rover Metro/100 vehicles fitted with 16 Valve 1400cc K Series.
- Class C** - Modified MG Metro Turbo and MG Metro 1380cc.
Rover Metro/100 vehicles fitted with 16 Valve 1400cc K Series.
- Class D** - Invitation class catering for Metros not complying with the technical regulations for classes A, B and C but restricted to a maximum capacity of 1400cc and the use of List 1A tyres. Entry to this class is at the discretion of the Championship Committee and is non-point scoring, having no annual awards.

5.3 SAFETY REQUIREMENTS

All MSA [Section K](#) Safety Criteria Regulations apply as relevant. The minimum mandatory requirements are as follows:

A Roll Cage complying with MSA Regulation [Q19.14.1](#) is mandatory. Driver protection by fire resistant padding to all areas of the Roll Cage near the driver is mandatory.

Additional drilling of the Roll Cage is prohibited.

Safety belts complying with MSA Regulation [K2.1.2](#) Four Point are mandatory - See MSA Regulation [Q19.14.2](#).

The standard production driver's seat must be removed and the replacement seat and mountings must comply with MSA Regulation [K2.2](#) and must include a headrest. It is recommended that all new seats comply with FIA 8855.

A high intensity rear light must be fitted, preferably at high level, see MSA Regulation [K5](#).

The fitting of an externally operated Circuit Breaker to MSA Regulation [K8](#) is mandatory.

Front and rear Towing Eyes are mandatory and must be painted red/yellow and easily recognisable.

An approved Fire Extinguisher in accordance with MSA Regulation [K3.1.2\(a\)](#) (**Class A & B**) or [K3.2](#) (**Class C**) is mandatory. Plumbed in for discharge into both cockpit and engine compartment, and activated from inside and outside the car. The minimum requirement is 2.25 litre AFFF/ZERO 2000 - See MSA Regulation [Q19.14.7](#).

5.4 GENERAL TECHNICAL REQUIREMENTS AND EXCEPTIONS

All vehicles must remain to the relevant standard production specifications in all respects, except where stated in the following Technical Regulations, and must comply with the MSA Technical Regulations. All modifications not allowed by these Regulations are expressly prohibited. Modifications to standard production components, or other authorised parts, are prohibited unless stated otherwise. Nuts, bolts, studs, washers and locking devices are free. Reducing the diameter and/or grade of safety critical fasteners is not permitted. Cars do not require an MOT Certificate or Road Tax although MG ZR 105/Rover 200/25 must be capable of being MOT'd and legally driven on the road. The use of trailers is permitted.

5.5 CHASSIS

MG Metro (all) - Any standard production MG Metro front/rear sub frame and mountings, or identical pattern replacements are permitted.

Rover Metro/100 (all) - Any standard production Rover Metro/100 front/rear sub frame and mountings, or identical pattern replacements are permitted.

Sub frames may be subjected to additional welding and strengthening but must always retain standard suspension pick-up point dimensions.

Mounting points of sub frames to the body shell must remain in the standard production positions.

Front sub frame mounting bushes are unrestricted.

The rubber inserts of the rear sub frame mounts may be replaced with other material, or the mounts reinforced to reduce flexing. The rear hydragas restraining straps may be removed and the rear sub frame bolted directly to the body shell.

5.7c.7 IGNITION SYSTEMS

No modifications are permitted.

5.7c.8 FUEL DELIVERY SYSTEMS

No modifications are permitted.

5.8 SUSPENSIONS

These must retain the original standard production components, except where stated otherwise, with the following permitted/prohibited modifications.

5.8.1 PERMITTED MODIFICATIONS

Metro (all) - A maximum of two rear anti-roll bars are permitted, these may be of any type and manufacturer. Mountings may be of any material/dimension and spherical rod ends are permitted.

Ground clearance/car ride height may be adjusted by modifying or machining the front/rear struts and/or increasing/decreasing the hydragas fluid pressure.

Hydragas units may be of any compatible Rover production unit. The hydragas unit interconnecting pipes may be disconnected or removed, and individual remote pipes and valves fitted.

Bump stops may be of any type or manufacturer, but must be made of a resilient/flexible material. Fixings may be modified to cater for car ride height adjustments. Bump stop reaction surfaces may be modified.

Suspension travel may be adjusted to reduce wheel droop by modifications to the rebound buffers.

Suspension bushes are unrestricted.

Front shock absorbers may be of any type or manufacturer. A maximum of one on each side fitted to standard

Class B (all) and **Class C (all)** - The mounting points of the rear suspension to the sub frame may be modified to allow for camber and tracking adjustment.

Class B (all) and **Class C (all)** - Uprated rear hubs are permitted.

MG Metro (all) - Only standard production front bottom arms are permitted. Bushes may be replaced by spherical bearings and the arm machined to fit the bearing.

MG Metro (all) - Any standard production MG Metro front anti-roll bar is permitted.

Class C MG Metro Turbo and **Class C MG Metro 1380cc** - The front bottom arms may be adjustable, subject to component approval by the Eligibility Scrutineer.

Rover Metro/100 (all) - Only standard production front upper arms and GTa/GTi lower wishbones are permitted.

Rover Metro/100 (all) - Any standard production front anti-roll bar is permitted.

Class B Rover Metro/100 and **Class C Rover Metro/100** - May alternatively fit upper arms part numbers MGF 440S (RH) & MGF 407S (LH) and/or

5.7b.8 FUEL DELIVERY SYSTEMS

Unless continuous metal lines are fitted, braided hose with screw connections are mandatory. Fuel lines must be adequately protected and clipped within the drivers compartment.

Class A Rover Metro/100 - Fuel pumps, filters and pressure regulators may be of any type or manufacturer.

Class B Rover Metro/100 and **Class C Rover Metro/100** - the fuel pressure valve may be of any type or manufacturer.

Class C Rover Metro/100 - it is permitted to route the fuel lines through the vehicle, subject to MSA regulation [J5.13](#).

5.7c ENGINE - MG ZR 105/ROVER 200/25 - K-SERIES

5.7c.1 PERMITTED MODIFICATIONS

The ECU is to remain standard. The Championship retains the right to check ECUs at any time. The engine is to remain standard although the clutch may be replaced by any non-standard single plate clutch. Multiple engine steadies are permitted. Engine mountings may be stiffened & strengthened.

5.7c.2 PROHIBITED MODIFICATIONS

Anything not stated.

5.7c.3 LOCATION

The unit must remain in its original position and inclination.

5.7c.4 OIL/WATER COOLING

Additional oil coolers may be fitted. Oil and coolant radiators may be of any type and manufacturer but must remain in the original compartment area. Oil and coolant pipes/hoses may be of any type. Thermostat may be of any type or manufacturer and it may be replaced by a flow restrictor. Coolant radiator electric fan may be of any type or manufacturer. The thermostatic switch may be removed. Coolant additives are permitted.

5.7c.5 INDUCTION SYSTEMS

The original air filter and induction system may be replaced but no additional ducting is permitted.

Standard production inlet manifolds must be retained.

5.7c.6 EXHAUST SYSTEMS

The exhaust is free beyond the mid mounted catalytic converter but must exit from the rear of the car. (For R25/MGZR which have 2 catalytic converters, the stuffing may be removed from the front unit - just after the manifold - only)

5.6 BODYWORK

5.6.1 MODIFICATIONS PERMITTED

5.6.1.1 General

Metro (all) - Seam welding of body shells is permitted.

MG ZR 105/Rover 200/25 - Seam welding is prohibited

All switches fuses and wiring may be replaced.

Rear screen wiper mechanism and associated parts/fittings may be removed.

Front windscreen wiper mechanism may be modified and/or relocated.

The windscreen washer system may be modified or removed.

MG ZR 105/Rover 200/25 - Body shells from any two-door MG ZR or Rover equivalent may be used but must remain to standard specification.

The Central Locking System must be rendered inoperable.

5.6.1.2 Interior

The front passenger seat and rear seats may be removed.

Door locking pins must be removed.

Steering lock must be removed unless the vehicle is road legal.

Heated windscreens are permitted.

The addition of plates to the throttle, brake and clutch pedals is allowed.

All Metro - All carpeting, sound deadening material/padding, roof lining, interior lights/switches/wiring may be removed. Door trim panels, rear side trim panels and the spare wheel cover may be removed. Metal plates must be fitted to cover inner door faces, and the right hand rear side if a fuel tank breather pipe is exposed, where the original trim panels are removed. Instrumentation is free but the standard production dashboard binnacle must remain.

Heater may be removed. Heater plenum in the engine bay may also be removed. The front bulkhead (firewall) must be intact, see MSA Regulation [J5.2.2](#). AN EFFECTIVE FORM OF WINDSCREEN DEMIST SYSTEM MUST BE FITTED IF THE HEATER IS REMOVED.

MG ZR 105/Rover 200/25- Heater and an effective form of windscreen demist system must be retained. The front bulkhead (firewall) must be intact, see MSA Regulation [J5.2.2](#).

The standard production driver's seat must be removed and the replacement seat and mountings must comply with MSA Regulation [K2.2](#) and must include a headrest. It is recommended that new seats comply with FIA 8855. The original factory fitted door panels may be replaced by fibreglass or alloy panels if necessary to accommodate the roll cage. The roof lining and all other factory fitted interior trim and fittings *may be removed*. The steering wheel may be changed. The spare wheel and tool kit must be removed. Airbags must be removed or de-activated.

5.6.1.3 Exterior

It is permitted to remove decorative strips and mud flaps, and front/rear

plastic bumper armatures.

Two additional fasteners, able to be operated from the outside, are compulsory on the bonnet. The original locking device must be removed. Bonnet hinges may be disconnected or removed providing a total of four additional external fasteners are fitted.

Two additional fasteners, able to be operated from outside, are compulsory on the tailgate. The original locking device may be removed. NOTE: REMOVAL OF THE LOCKING DEVICE IS RECOMMENDED ON SAFETY GROUNDS. Two exterior mirrors are mandatory and must be mounted in the correct plane for use.

MG Metro (all) - Later specification plastic bumpers may be fitted.

MG Metro (all) - Any standard production MG Metro or MG Metro Turbo bonnet may be fitted, subject to 5.6.2.4.

Class B Modified MG Metro, Class B Rover Metro/100 and Class C (all) - Polycarbonate side and rear windows are allowed, and window mechanisms may be removed.

Reworking of the bodywork is permitted as follows: -

- i) Removal of front wheel arch lip to aid clearance of tyre, where 13" wheels are fitted.
- ii) Rear wheel arch lip may be deformed to aid clearance, where 13" wheels are fitted.
- iii) **Class C (all)** - The body may be cut in order to fit rear shock absorber turrets, and a cross brace fitted for strengthening purposes.
- iv) **Class C MG Metro 1380cc** - Modification of the front bulkhead to give clearance for the carburettor and air filter, but the front bulkhead (firewall) must be intact, see MSA Regulation [15.2.2](#).

MG Metro (all) - In order to improve engine cooling, reworking of bodywork is permitted as follows: -

- i) Where heater plenums have been removed the rear of the bonnet may be raised up to a maximum of 25mm above its standard production position, and the slam panel modified. The headlamp panel may be modified to allow fitting of air scoops or to improve airflow into the engine bay. The bonnet front must remain in alignment with adjacent panels and the modifications must not be visible from the outside with the bonnet closed.
- ii) **Class C MG Metro Turbo and 1380cc** - It is permitted to modify the lower edge of the grill slats, the modifications must not be visible from outside with the bonnet closed.
- iii) **Class C MG Metro Turbo and 1380cc** - The vertical bars in the front bumper, mounting and body shell may be removed.

iv) **Class B Rover Metro/100 and Class C Rover Metro/100** - four 50mm diameter holes may be cut in the number plate section of the front bumper directly in front of the radiator.

standard production standards, excluding modification of pipe work if the heater is removed. An oil cooling radiator is not permitted.

Class B Rover Metro/100 and Class C Rover Metro/100 - Oil and coolant radiators may be of any type or manufacturer but must remain in the original compartment area. Oil and coolant pipes may be of any type or manufacturer. Thermostat housing and thermostat may be removed or if fitted can be of any type or manufacturer and can be relocated. Coolant radiator electric fan may be of any type or manufacturer. The thermostatic switch may be removed.

Coolant additives are permitted.

5.7b.5 INDUCTION SYSTEMS

Intake system must be standard production, except where stated otherwise. Standard warm-up features may be immobilised or discarded.

An air filter element must be fitted and may be of any type or manufacturer.

Class A Rover Metro/100 - Must retain the standard production carburettor but the jets, needle and spring are free. An after market air filter body is permitted. Carburettor air boxes are prohibited.

Class B Rover Metro/100 and Class C Rover Metro/100 (16V Multipoint Injection) - The inlet manifold may be either the original alloy 1400cc standard production manifold with the 55mm throttle body OR the later plastic 1400cc standard production manifold with the standard production plastic or alloy 48mm throttle body. The alloy 52mm Trophy throttle body and/or the VVC inlet manifold are not permitted. The induction system up to the throttle body may be of any type or manufacturer.

5.7b.6 EXHAUST SYSTEMS

Heat shields are free.

Rover Metro/100 (all) - Exhaust system for must exit at the rear of the vehicle.

Class A Rover Metro/100 - The standard production exhaust manifold must be retained but the remainder of the system may be of any type or manufacturer.

Class B Rover Metro/100 and Class C Rover Metro/100 - The exhaust manifold and the remainder of the system may be of any type or manufacturer.

5.7b.7 IGNITION SYSTEMS

Ignition system must be standard production item and must include a working distributor.

Ignition coil, spark plugs & HT leads can be from any manufacturer. The coil may be relocated Simple rev limiters and shift lights are permitted.

Class A Rover Metro/100 - An ECU is not permitted. Standard ignition system must be retained.

Class B Rover Metro/100 and Class C Rover Metro/100 - The ECU may be chipped or be replaced by one of any type or manufacturer. Genuine Rover MEMS 3 ECUs may be run in the wasted spark configuration.

Systems must comply with the requirements of MSA regulations
[Q19.9.2/3/4](#).

5.7b.1.2 Class B Rover Metro/100 – 1397cc 8 Valve, Fuel Injected

Cylinder head must be standard production 1400cc 8V with standard valves inlet 34mm, exhaust 31mm – no material may be removed from the ports but combustion chamber can be machined/polished to regulate compression ratio.

Camshaft must be the standard production item with maximum 9.0mm lift/240 degree duration.

Maximum compression ratio 10.25:1.

5.7b.1.3 Class B Rover Metro/100 and Class C Rover Metro/100 – 1397cc 16 Valve, Fuel Injected

Maximum compression ratio 11.0:1.

Cylinder Head may be either the standard production 1400cc K series 16V High Port or 16V Low Port unit – no material may be removed from the ports but combustion chamber can be machined/polished to regulate compression ratio.

Standard valves must remain with maximum permitted sizes of inlet 27.8mm, exhaust 24.2mm .

High Port Cylinder Head maximum manifold port sizes - Inlet 35mm, exhaust 34mm (Nominal 34.3/33.3mm) and maximum combustion chamber port sizes – inlet 33.5mm, exhaust 37.5mm (Nominal 32.8/36.8mm)

Low Port Cylinder Head inlet/exhaust port sizes must remain standard (Nominal manifold inlet port size 32mm)

Any Rover K series 1400cc 16V production camshaft may be used with a maximum lift of 8.9mm and maximum 244 degree duration.

Hydraulic cam followers must be retained but can be of any production K series type.

The 1400cc 16V MPi K series Damp Liner engine is also permitted

Class C Rover Metro/100 - Vernier cam pulleys are permitted. Pistons are free although compression ratio must be maintained.

5.7b.2 PROHIBITED MODIFICATIONS

All non-standard production electronic engine management aids are prohibited.

Solid valve lifters are not permitted.

VVC and VHPD cylinder heads are NOT permitted (Inlet port nominal 36mm & valves inlet 31mm/exhaust 27mm)

5.7b.3 LOCATION

The engine must remain in its original position and inclination. Engine mountings may be stiffened and strengthened.

5.7b.4 OIL/WATER COOLING

Rover Metro/100 (all) - Electric water pumps are not permitted.

Class A Rover Metro/100 - Cooling systems to remain to original stan-

5.6.1.4 Silhouette

Standard production bumpers, front grille and silhouette, must be retained.

MG Metro (all) - The front MG badge must be retained.

MG Metro (all) - Only MG Metro Turbo standard production front spoilers and/or body kits are allowed.

Rover Metro/100 (all) - Any standard production Rover Metro or Rover 100 body kit is permitted.

5.6.1.5 Ground Clearance

Class A MG Metro, Class B MG Metro Turbo and Class B Modified MG Metro - A minimum of 80mm (with the driver on board) excluding the exhaust which must not be lower than 40mm.

Class A Rover Metro/100 and Class B Rover Metro/100 - The minimum ride height measurement of 80mm excludes the plastic sill trim and front bumper/spoiler, but is still subject to MSA regulation [J5.20.11](#).

Class C (all) - a minimum of 40mm (with the driver on board) including the exhaust, in accordance with MSA Regulation [J5.20.11](#).

MG ZR 105/Rover 200/25 - 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 mm front hub centre to wheel arch.

5.6.2 MODIFICATIONS PROHIBITED

5.6.2.1 General

Apart from permitted changes, the body shell, bolted panels and hinged panels must remain in the original production material and may not be modified in any way that affects the integrity of the vehicle, as judged by the Eligibility Scrutineer. Fibreglass and other similar non-metallic materials are not permitted.

MG ZR 105/Rover 200/25 - apart from permitted changes, the body shell, bolted panels and hinged panels must remain in the original production material and may not be modified in any way that affects the integrity of the vehicle, as judged by the Eligibility Scrutineer. Fibreglass and other similar non-metallic material external panels are not permitted.

5.6.2.2 Interior

Removal of the dashboard is not permitted.

5.6.2.3 Exterior

Glass sunroofs are not allowed; the glass must be replaced by a metal panel. Laminated screens are mandatory.

Class A MG Metro and Class B MG Metro Turbo - All other original window glass must remain.

5.6.2.4 Silhouette

The bonnet, grille, front lights, bumpers and wings must be compatible.

5.6.2.5 Ground Clearance

Under body protection or fairing is prohibited.

5.6.2.6 Spare Wheel Well

The spare wheel well must remain intact.

5.7a ENGINE – MG METRO – A+ SERIES

This must be the standard A+ series production unit for each class to the original manufacturers specification, with the following permitted/prohibited modifications.

In addition the following specific points apply: -

Con-rods must be Rover A+ production items and cannot be lightened except where stated otherwise.

Crankshaft must be a Rover A+ production item and cannot be lightened except where stated otherwise.

Pushrods must be standard production material, composite materials are not permitted.

Maximum crankshaft stroke 81.30mm.

5.7a.1 PERMITTED MODIFICATIONS

Pistons may be of any type and manufacturer except where stated otherwise.

Fully floating gudgeon pins and bushed connecting rod ends are permitted.

It is permitted to use a duplex timing chain and sprockets (including vernier for **Class A**, **Class B** and **Class C**) for the camshaft drive.

Other similar chain based drives are also permitted. Offset camshaft keys are permitted.

It is permitted to regrind, cross drill and heat-treat the crankshaft.

It is permitted to balance all engine parts, including flywheel and clutch assemblies.

Crankshaft and camshaft bearings may be any material or manufacturer.

A Centre Main Bearing Strap or four-bolt centre main cap is permitted.

Camshafts having the same profile and lift may be fitted as alternatives to the specified Rover camshafts.

Cam followers may be changed to other material and manufacturer.

Valve guides must be fitted in the standard plane and position except where stated otherwise, material may be of any type or manufacturer.

It is permitted to use any valve rocker with standard production rocker ratio but not roller rocker/tip, except where stated otherwise. It is permitted to remove material from the rockers to achieve lift, also to weld pressed steel rockers along the top surface to minimise flexing. NOTE: USING STANDARD PRODUCTION PRESSED STEEL ROCKERS MAY PUT VALVE LIFTS ABOVE THE MAXIMUM LIMIT – THOROUGHLY CHECK.

A heavy-duty rocker shaft is permitted.

It is permitted to machine the cylinder head, block faces and piston crowns

the cylinder head.. The outlet pipe may exit through or below the body left hand sill not more than 650mm forward of the rear wheel centre.

5.7a.7 IGNITION SYSTEMS

Any Rover 'A' series production distributor is permitted, with the curve modified to provide the optimum advance required. It must remain in its original position. The vacuum advance may be disconnected or removed.

Ignition coils, spark plugs and HT leads may be of any type or manufacturer. The coil may be relocated.

Electronic systems are permitted. Apart from simple rev-limiters and shift lights, all electronic engine management aids are prohibited.

5.7a.8 FUEL DELIVERY SYSTEMS

Fuel pumps, filters and pressure regulators may be of any type or manufacturer.

Unless continuous metal lines are fitted, braided hose with screw connections are mandatory. Fuel lines must be adequately protected and clipped within the drivers compartment.

Class C MG Metro Turbo and **Class C MG Metro 1380cc** - It is permitted to route the fuel lines through the vehicle, subject to MSA regulation [J5.13](#).

Class C MG Metro Turbo - A fuel cooler (air radiator only) may be fitted.

5.7b ENGINE - ROVER METRO/100 – K SERIES

This must be the standard production K series unit for each class to the original manufacturers specification, with the following permitted/prohibited modifications.

5.7b.1 PERMITTED MODIFICATIONS

All engines must retain the standard production cylinder block, cylinder head, crankshaft, camshaft, con rods, pistons, valves, valve springs and all other standard production parts for the relevant engine capacity, except where stated elsewhere. Cylinder head may be skimmed. Gaskets, oil pump, oil filter and drive belts may be from any manufacturer.

Rover Metro (all) - The only permitted engine is the 1.4 K-series (1397cc), i.e. bore 75.00mm and stroke 79.00mm.

5.7b.1.1 Class A Rover Metro/100 – 1397cc 8 Valve, Carburettor Version

Cylinder head must be standard production 1400cc 8V with standard valves inlet 34mm, exhaust 31mm – no material may be removed from the ports but combustion chamber can be machined/polished to regulate compression ratio.

Camshaft must be the standard production item with maximum 9.0mm lift/240 degree duration.

Maximum compression ratio 10.25:1

Oil pumps and filters may be of any type and manufacturer.

Engine breathing systems may be modified and a suitable catch tank fitted -

Class A MG Metro and **Class B MG Metro Turbo** - Internal polishing of the manifold is permitted.

Class B Modified MG Metro – The manifold may be freely modified internally.

Class C MG Metro Turbo - Internal polishing and metal removal from the manifold are prohibited. It is permitted to fit a heat shield.

Class C MG Metro 1380cc - Inlet manifolds and carburetors may be of any type or manufacturer.

Turbochargers.

All units must be set and sealed prior to practice and race use by the Eligibility Scrutineer. The penalty is exclusion. Access to the actuator and rod must be unobstructed at all times for checking purposes.

Class B MG Metro Turbo.

Must retain the standard production MG Metro Turbo turbocharger unit, together with the standard production actuator capsule. The actuator setting is 3.5psi for 0.015" (0.38mm) of actuator rod movement.

Class C MG Metro Turbo.

Only the standard production MG Metro Turbo turbocharger unit or STR 985 are permitted, together with actuator capsule STR 1081 (stamped 430099-32). The actuator setting is 5.0psi for 0.015" (0.38mm) of actuator rod movement.

The only modifications permitted are:

- 1) The dump valve may be removed and blanked off.
- 2) Removal of the boost modulator ECU.
- 3) The plenum chamber must be fitted with an additional nozzle (minimum bore 2mm). The actuator must be controlled by a hose directly connected to this additional nozzle.
- 4) A boost gauge may be fitted. It may only be plumbed into the plenum to fuel pressure regulator hose.

Class C MG Metro Turbo - The only permitted modifications to the standard production SU carburettor are:

- 1) Drill body and counterbore the float chamber for external balance pipe fitting.
- 2) Piston springs are free.
- 3) Enlarged needle valves in the float chamber to assist fuel flow.
- 4) A spacer may be fitted to increase the float chamber capacity.

5.7a.6 EXHAUST SYSTEMS

Except where stated otherwise the exhaust manifold and the remainder of the exhaust system may be of any type or manufacturer. The exhaust tailpipe must exit at the rear of the car except where stated otherwise.

Exhaust manifolds and down pipes may be heat lagged.

Heat shields are free.

Class B MG Metro Turbo - The standard production exhaust manifold must be retained.

Class C MG Metro Turbo - The standard production exhaust manifold must be retained. It is permitted to modify the manifold to match the ports in

to achieve the required compression ratio. Two additional head/block studs and nuts are permitted. Hard exhaust valve seats may be fitted.

Valve springs and caps are unrestricted.

Oil pumps and filters may be of any type and manufacturer. Oil pressure may be adjustable.

Driving pulleys, crank damper pulley and belts external to the engine are unrestricted for A-series.

Engine breathing systems may be modified and a suitable catch tank fitted. Systems must comply with the requirements of MSA Regulations

[Q19.9.2/3/4.](#)

Gasket types are unrestricted.

5.7a.1.1 Class A MG Metro

The use of standard type pistons is mandatory – i.e. dished top.

It is permitted to polish the cylinder head combustion chambers but no material may be removed from the cylinder head ports. The maximum permitted compression ratio is 11:1.

The maximum permissible piston diameter is standard production plus 0.060"

A Kent 286 or Rover STR 930 camshaft is permitted as an alternative to the Rover CAM 6648 camshaft.

Maximum permissible valve lifts are:

Kent 286 Inlet – 0.380" Exhaust – 0.400"

Rover STR930 Inlet – 0.394" Exhaust – 0.394"

Measured with 0.016" valve clearance. (Standard production dimensions are Inlet full lift - 0.329" Exhaust full lift - 0.316" Measured at valve clearance 0.12"

Standard production inlet and exhaust valves must remain with the following diameters:

Inlet 35.58 – 35.71mm Exhaust 29.25 – 29.38mm

5.7a.1.2 Class B Modified MG Metro

It is permitted to modify the cylinder head combustion chambers, inlet and exhaust ports. The compression ratio is unrestricted.

The maximum permissible piston diameter is standard production plus 0.060".

A Kent 286 or Rover STR 930 camshaft is permitted as an alternative to the Rover CAM 6648 camshaft.

Maximum permissible valve lifts are:

Kent 286 Inlet – 0.380" Exhaust – 0.400"

Rover STR930 Inlet – 0.394" Exhaust – 0.394"

Measured with 0.016" valve clearance.

Rover CAM 6648 Standard production dimensions.

Standard production inlet and exhaust valves must remain with the following diameters:

Inlet 35.58 – 35.71mm Exhaust 29.25 – 29.38mm

5.7a.1.3 Class B MG Metro Turbo

It is permitted to polish the cylinder head combustion chambers but no material may be removed from the cylinder head ports. The maximum permitted compression ratio is 9.5:1.

The maximum permissible piston diameter is standard production plus 0.060".

A Rover CAM 6648 camshaft is permitted as an alternative to the MG Metro Turbo camshaft. Valve lifts to be to standard production dimensions.

Standard production inlet and exhaust valves must remain with the following diameters:

Inlet 33.42mm Exhaust 29.45mm

5.7a.1.4 Class C MG Metro Turbo

It is permitted to modify the cylinder head combustion chamber, inlet and exhaust ports but standard inlet manifold locating rings (nominal outer diameter 34mm) must be retained. The maximum permitted compression ratio is 8.65:1. Modifications to the cylinder head and block to regulate coolant flow are permitted.

The maximum permissible piston diameter is standard production plus 0.020".

A Rover CAM 6648 camshaft is mandatory. Maximum valve lift is 8.38mm (0.330") with a valve clearance of 0.4mm(0.016").

Standard production inlet and exhaust valves must remain with the following diameters:

Inlet 35.58mm Exhaust
29.45mm

Crankshaft STR 931 or standard production tufrided (STR 0040) are also permitted. The crankshaft may be lightened.

It is permitted to lighten and/or balance the connecting rods. It is permitted to machine a small groove 1mm wide and 0.5mm deep on both sides of the con-rod above the top bearing and/or modify the main oil gallery to allow a jet of oil to be sprayed into the piston crown to aid cooling.

The crankshaft and connecting rods can be chemically or heat-treated.

5.7a.1.5 Class C MG Metro 1380cc

It is permitted to modify the cylinder head combustion chambers, inlet and exhaust ports. The compression ratio is unrestricted.

The maximum capacity is 1380cc.

A Rover STR930 or Kent STR930 camshaft is mandatory.

Offsetting of valve guides is permitted.

Valves may be of any type or manufacturer.

Rocker assembly is unrestricted.

Crankshaft STR 931 or standard production tufrided (STR 0040) are also permitted. The crankshaft may be lightened and wedged.

It is permitted to lighten and/or balance the connecting rods.

Modifications to the cylinder head and block to regulate coolant flow are permitted.

The crankshaft and connecting rods can be chemically or heat-treated.

5.7a.2 PROHIBITED MODIFICATIONS

Further block and cylinder head modifications to those specified above.

Modifications to standard production valves, except where stated otherwise.

Modifications to specified camshafts.

Fitting of eight port cylinder heads.

Belt driven camshaft drives.

Offsetting of valve guides except where stated otherwise.

Scatter pattern camshafts.

The lightening of any internal engine moving part, except for balancing purposes, except where stated otherwise.

Roller or roller tip rockers, except where stated otherwise.

Wedging of crankshafts is prohibited except where stated otherwise.

Dry sump lubrication.

Offset rocker bushes or rocker pillars, except where stated otherwise..

5.7a.3 LOCATION

The unit must remain in its original position and inclination except where stated otherwise. Multiple engine steadies are permitted. Engine mountings may be stiffened & strengthened.

Class C MG Metro - It is permitted to move the engine unit upward by up to 25mm in relation to the sub frame.

5.7a.4 OIL/WATER COOLING

Oil and coolant radiators may be of any type and manufacturer but must remain in the original compartment area.

Oil and coolant pipes/hoses may be of any type.

Thermostat may be of any type or manufacturer and it may be replaced by a flow restrictor.

Coolant radiator electric fan may be of any type or manufacturer. The thermostatic switch may be removed.

Coolant additives are permitted.

Class C (all) - Electric Water pumps are permitted.

5.7a.5 INDUCTION SYSTEMS

An air filter element must be fitted. Air filter bodies, ducting, intake scoops and filter elements may be of any type or manufacturer.

Carburettor air boxes are prohibited. Standard warm-up features may be immobilised or discarded.

Flexible ducting for carburettor body cooling is permitted, limited to a single duct of maximum diameter 100mm (or equivalent area).

Standard production inlet manifolds must be retained except where stated otherwise. Fuel injection is prohibited.

Standard production SU carburettors must be retained and must not be modified, except where stated otherwise. Needles and settings are free.

Ram pipes (stacks) are permitted.