

## **MG CAR CLUB NORTH WESTERN CENTRE COCKSHOOT CUP CHAMPIONSHIP 2018**

### **1. SPORTING REGULATIONS – GENERAL**

#### **1.1 Title and Jurisdiction:**

The Cockshoot Cup Championship is organised and administered by the MG Car Club North Western Centre 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.

MSA Championship Permit No CH2018/R074 Race Status National B

MSA Championship Grade : D

#### **1.2 Officials :**

- 1.2.1 Co-ordinator : Paul Goodman, 36, Deva Close, Poynton, Stockport, Cheshire, SK12 1HH, 01625 876300
- 1.2.2 Licensed Eligibility Scrutineer : Reg Tassiker
- 1.2.3 Championship Stewards : David Rainsbury, Nigel Minay, Paul Hurst (MSA Regulations (G)2.7, (G)2.7.1, (W)2.2.1)

#### **1.3 Competitor Eligibility :**

- 1.3.1 Entrants must: (a) be 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 MSA Entrants Licence.
- 1.3.2 Drivers and Entrant/Drivers must (a) be current members of the MG Car Club (b) be registered for the Championship and (c) be in possession of a valid competition racing national B licence as a minimum (d) deleted (e) deleted.
- 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 £60 payable to “MG Car Club North Western Centre Ltd”
- 1.4.3 Registration numbers will be the permanent competition numbers for the Championship.

#### **1.5 Championship Rounds :**

The Cockshoot Cup Championship will be contested over ten events as follows:

Round 1	April 7 <sup>th</sup>	Silverstone National	MGCC
Round 2	June 2 <sup>nd</sup>	Silverstone GP	MGCC
Round 3	June 3 <sup>rd</sup>	Silverstone GP	MGCC
Round 4	July 14 <sup>th</sup>	Donington Park	MGCC
Round 5	July 15 <sup>th</sup>	Donington Park	MGCC
Round 6	August 11 <sup>th</sup>	Anglesey Circuit	BRSCC
Round 7	August 12 <sup>th</sup>	Anglesey Circuit	BRSCC
Round 8	September 1 <sup>st</sup>	Oulton Park	MGCC
Round 9	September 29 <sup>th</sup>	Oulton Park	BRSCC

#### **1.6 Scoring :**

- 1.6.1 Points will be awarded to competitors listed as classified finishers in the Final Results as follows: 10,8,7,6,5,4,3,2, and 1 for all other classified finishers in each class plus 1 point for each starter. If there are less than three starters in any class, half points will be awarded.
- 1.6.2 The totals from the best seven qualifying rounds will determine final championship points and positions.
- 1.6.3 Ties shall be resolved as follows: - Scores achieved by the respective driver’s performances in their 8th race will be taken into account. If there is still a tie, scores in the 9<sup>th</sup> race will be taken into account. If there is still a tie then the contender with the most class wins in all the events will be the winner. If this fails to resolve the issue then the number of fastest laps will be taken into account. If a tie still exists then the Championship will be jointly awarded.
- 1.6.4 Where the race distance has been reduced (2.6) it shall still count as a full points scoring round.

#### **1.7 Awards :**

- 1.7.1 All awards are to be provided by the race organisers.
- 1.7.2 First, second and third in each class A, B, C, F per round subject to 3,5, and 7 starters.

- 1.7.3 The Cockshoot Cup and replica, the Cockshoot Class Trophies, and second and third in each class will be awarded for the Championship to competitors who have started more than 50% of the races
- 1.7.4 Awards will be presented at the end of each event , and at the end of the Championship at the designated presentation ceremony.
- 1.7.5 Deleted
- 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.

## **2. Championship Event Meetings & Race Procedures**

### **2.1 Entries**

- 2.1.1 Competitors are responsible for sending correct and complete entries with the correct entry fees prior to the closing date for entries before each event.
- 2.1.2 Incorrect or incomplete entries (including Driver to be Nominated entries) are to be held in abeyance until they are complete and correct and the date of receipt for acceptance of entry purposes shall be the date on which the Meeting Organiser receives the missing or corrected information or fee.
- 2.1.3 Any withdrawal of Entry or Driver/car changes made after acceptance of any entry must be notified to the Meeting Organisers in writing. D25.1.12 applies.
- 2.1.4 The Entry Fee for each event shall be specified in the SRs and on the entry form.
- 2.1.5 Reserves will be listed in the Final List of Entries published with Final Instructions or in a Bulletin.

### **2.2 Briefings**

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

### **2.3 Qualification Practice**

- 2.3.1 Should any Practice session be disrupted the Clerk of the Course shall not be obliged to resume or re-run the session; The decision of the Clerk of the Course shall be final.
- 2.3.2 Each driver shall complete a minimum of 3 laps in the car to be raced, and in the correct session, in order to qualify (MSA Regulations Q4.5).

### **2.4 Races**

Should any races 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).

### **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: - 1. 1 minute to start of Green Flag /Pace Lap – Start Engines/Clear Grid. 2. 30 Seconds – Visible and audible warning for start of Green Flag/Pace Lap. 3. A five second board will be used to indicate that the grid is complete. 4. The red lights will be switched on five seconds after the board is withdrawn.
- 2.5.3 Any car removed from the grid after the 1 minute stage or driven into the pits on the Green Flag lap shall be held in the pitlane and may start the race after the last car has passed the startline or pitlane exit, whichever is the later to take the start from the grid.
- 2.5.4 Any driver unable to start the Green Flag/Pace Lap or start are required to indicate their situation as per MSA Regulation (Q) 12.13.2, In addition any driver unable to maintain grid position on the Green Flag Lap, to the extent that ALL other cars are ahead of them, may complete the Green Flag Lap but MUST remain at the rear of the last row of the grid but ahead of any cars to be started with a time delay.
- 2.5.5 In the event of any starting lights failure the Starter will revert to use of the National Flag.

### **2.6 Session Red Flag**

Should the need arise to stop any race or practice, RED LIGHTS will be switched on at the Startline and RED FLAGS will be displayed at the Startline and at all Marshals Signalling Points around the Circuit. This is the signal for all drivers to cease circulating at racing speeds, to slow to a safe and reasonable pace and to return to the pit lane, during practice, and to the starting grid area, during a race, unless otherwise directed by officials. Cars may not enter the pits unless directed to do so. Work on cars already in the Pits must cease when a race is stopped.

## **2.7 Pits, Paddock and Pitlane Safety**

- 2.7.1 Pits and Paddock: Competitors must ensure that the MSA, Circuit Management and Organising Club Safety Regulations are complied with at all times.
- 2.7.2 Pitlane: The outer lane or lanes are to be kept unobstructed to allow safe passage of cars at all times. The onus shall be on all drivers to take all due care and respect the pit lane speed limits.
- 2.7.3 Refuelling: May only be carried out in accordance with the MSA General Regulations, Circuit Management Regulations and the SRs or Final Instructions issued for each Circuit/Meeting.
- 2.7.4 Speed Limit in the Pit Lane will be 30mph.

## **2.8 Race Finishes**

After taking the Chequered Flag drivers are required to : 1. Progressively and safely slow down 2. remain behind any competitors ahead of them. 3. return to the pitlane entrance/paddock entrance as instructed. 4. comply with any directions given by Marshals or Officials. 5. keep their helmets on and harnesses done up while on the circuit or in the pitlane.

## **2.9 Results**

All practice timesheets, grids, race results are to be deemed Provisional until all vehicles are released by scrutineers after post practice/race scrutineering and/or after completion of any judicial or technical procedures. (MSA regulation (D) 26.3).

## **2.10 Timing Modules**

All cars must be fitted with transponders complying with the requirements of TSL Timing.

## **2.11 Operation of the Safety Car**

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

# **3. SPECIFIC CHAMPIONSHIP REGULATIONS**

## **4. SPECIFIC CHAMPIONSHIP PENALTIES**

### **4.1 Infringements of Technical Regulations**

- 4.1.1 Arising from post practice scrutineering or judicial action: Minimum penalty: the provisions of MSA Regulations 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 will invoke the provisions of Regulation C3.5.1 (c).

# **5. TECHNICAL REGULATIONS**

## **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 Cockshoot Cup Championship is for Competitors participating in MG Cars and A H Sprites in four classes; Class A for standard cars; Class B for road modified cars; class C for modified cars; and Class F for MGF and MGTF . Cars must comply with MSA General Technical Regulations MSA Year Book Sections J,K and Q.

## **5.3 Safety Requirements**

The following Articles of MSA Section K Safety Criteria Regulations will apply:- 1.1.1 to 1.6.1,2.1 to 3.3.3,5.1 to 6.8.1 to 8.59.1 to 9.3,10.1 to 11.3,12,13,14.1 to 14.3. Drivers side door bar connected roll cage is recommended.

## 5.4 Class A – MG Midgets and A H Sprites

- 5.4.1 Bodywork – Permitted Modifications – Fibreglass bonnet, front wings, boot lid, one piece front; ventilation holes in bonnet and front wings up to 5% of their surface area; bumpers may be removed; carpets, trim, and passenger seat may be removed; side windows can be replaced with alternative transparent material with a minimum thickness of 5mm; competition drivers seat; rev counter relocation. Prohibited Modifications – spoilers; alteration to the body shape.
- 5.4.2 Engine – Permitted Modifications – Marina or Ital blocks can be used; 11 stud cylinder heads may be used; cylinder block rebore +0.060 giving maximum bore 2.84 inches (1275), 3.06 inches (1500); top face of block can be resurfaced; 1500 cc engines counterbore can be maintained at correct depth; crankshaft regrind to normal undersized bearing dimensions; maximum stroke 3.209 inches (1275), 3.452 inches (1500); chemical/heat treatment of crankshaft; removal of small amounts of metal in order (up to 5% by weight) to achieve balancing of crank; balancing of con rods, minimum weight 625 grams (including big end nuts and bolts, but not shells); chemical/heat treatment of con rods, pistons from alternative manufacturer to standard design; metal removal from inside piston skirt below gudgeon pin bosses to achieve equal piston weights; 1500 cc piston crown flat or dished, minimum deck clearance 0.015 inches; cylinder head can be gas flowed; valve springs can be of alternative manufacture; 1275 and 1500 any camshaft with vernier cam adjustment, 1275 and 1500 no limit on lift; reprofiling of rockers on the pad; standard rocker ratio; valve profile modified to non original; non original valves of original diameter; alternative material valve guides; metal can be removed from flywheel minimum weight 6.80 kg; flywheel can be resurfaced; alternative manufacture clutch cover and plate must bolt to original bolt and dowel holes and be of original diameter; sump can be baffled; non original rocker cover; oil pressure can be altered.
- 5.4.3 Engine must be located in original location using original mounting.
- 5.4.4 Oil cooler and fittings may be added; electric fans can be fitted; mechanical fans can be removed; heater can be removed; radiator ducting can be added; cooling systems can be replumbed; thermostat optional.
- 5.4.5 Induction Systems – Inlet manifold can be non original; metering needle, jet, piston, spring and damper can be changed or modified; carburettor bodies and butterflies can be modified by removing or adding metal but the diameter of the butterfly and the bore of the body must be as standard; air filters can be non original.
- 5.4.6 Exhaust System – Exhaust manifold and system can be non-original, must exit at the rear and conform to MSA noise regulations.
- 5.4.7 Ignition Systems – Ignition system must use a distributor driven by the camshaft; electronic ignition is allowed, but engine management systems using electronic circuits are not permitted; advance and retard must be by mechanical means.
- 5.4.8 Fuel pump may be changed to non-original in alternative location.
- 5.4.9 Suspension – Permitted Modifications – Front suspension spring can have any number of coils with rate being free; damper rates may be altered; anti roll bar up to a maximum of 11/16 inch using original mounting points; alternative material bushes; bump stops modified or removed; adjustable top trunnion bushes; non original top trunnions. Rear Suspension – alternative material bushes; lowering blocks; telescopic shock absorbers using any design of bracket; spring rates may be altered.
- 5.4.10 Transmission – Alternative design half shafts can be used; differential ratios 3.9:1, 3.7:1 and 4.2:1 are allowed. Bellhousing, gearbox casing and gears, clutch, clutch release mechanism and master cylinder can be non-original but must not have more than five speeds and must not have a sequential change system.
- 5.4.11 Electrics – Battery can be relocated.
- 5.4.12 Brakes – Permitted Modifications – 1275 cc cars can use parts from 1500 cc cars; backing plates may be removed or deformed; non original lining material and rear drums to original size; non original hoses; alternative size rear brake cylinder; brake cooling ducts.
- 5.4.13 Wheels/Steering – Any steel or alloy wheel 13inch diameter and maximum width 5inch and any steering wheel can be used.
- 5.4.14 Tyres – Any moulded treaded tyre; minimum aspect ratio 60%; maximum tyre size 175/60/13.
- 5.4.15 Minimum Weight Limit – 1275cc cars including driver 750 kg, 1500cc cars including driver 770kg, any ballast must be attached to the floor in the passenger seat area.

5.4.16 Fuel Tank can be replaced by alternative type in any location.

## 5.5 Class A - MGB

- 5.5.1 Bodywork – Permitted Modifications – Fibreglass front wings; Leyland ST pattern spoilers on the front and rear; ventilation holes in bonnet and wings up to 5% of their surface area; carpets, trim, and passenger seat can be removed; side window glass can be replaced with alternative transparent material with minimum thickness 5 mm; MGBGT fibreglass tailgate with perspex rear window; Sebring style headlamp covers; rubber bumper cars can be converted to chrome bumper specification; front and rear bumpers and irons can be removed. Prohibited Modification – no alteration to the bodyshape is allowed.
- 5.5.2 Engine – Permitted Modifications – Cylinder block rebore + 0.060 giving maximum bore 3.320 inches; top face of block can be resurfaced; crankshaft regrind to normal undersized bearing dimensions; maximum stroke 3.507 inches; chemical/heat treatment of crankshaft; removal or addition of small amounts of metal (up to 5% by weight) in order to achieve balance of crank; balancing of con rod, minimum weight old type (angle split big end) 855 grams, new type 800 grams (including bearing shells); tufriding of rods; pistons from alternative manufacturer to standard design; metal removal from inside the piston skirt below the gudgeon pin bosses to achieve equal balance; minimum piston weight, long skirt 540 grams, short skirt 455 grams; cylinder heads can be gas flowed; minimum combustion chamber not limited; valve seats can have inserts fitted and must be recut at 45 degrees with a minimum seat width of 3/32 inches; larger valves as fitted to later cars can be fitted to earlier cylinder heads; valve springs can be of alternate manufacture; maximum lift on free camshaft is not limited; vernier adjustment of camshaft is permitted; standard rocker ratio; reprofiling of rockers on the pad; metal can be removed from flywheel minimum weight 8.85 kg; flywheel can be resurfaced; clutch cover and plate must bolt to original bolt and dowel holes and can be of alternative manufacture; sumps can be baffled; oil pressure can be altered; non original rocker cover.
- 5.5.3 Engine must be located in original location using original mounting.
- 5.5.4 Oil Cooler and fittings can be added; electric fans can be fitted; mechanical fans can be removed.
- 5.5.5 Induction Systems – Carburettor needle, jet, piston, spring, and damper can be changed or modified but the diameter of the butterfly and the bore of the body must be as standard; carburettor bodies and butterflies can be modified by removing or adding metal; air filters can be non original.
- 5.5.6 Exhaust System – Exhaust manifold and exhaust systems can be non-original, must exit at the rear of the car and conform with MSA noise regulations.
- 5.5.7 Ignition Systems – Ignition system must use a distributor driven by the camshaft; electronic ignition allowed but engine management systems using electronic circuits are not permitted; advance and retard must be by mechanical means.
- 5.5.8 Fuel pump may be changed to non-original and relocated.
- 5.5.9 Suspension – Permitted Modifications – Front suspension spring rates may be altered; anti roll bar up to a maximum of ¾ inches using original mountings; alternative material suspension bushes; modified lower wishbone arms. Prohibited Modifications – front and rear springs must have standard number of coils and leaves.
- 5.5.10 Transmission – No Permitted Modifications; differential ratio must be 3.9:1.
- 5.5.11 Electrics – No Permitted Modifications.
- 5.5.12 Brakes – Permitted Modifications – Back plates may be removed or deformed, non-original lining materials; alternative size rear wheel cylinders; non-original hoses; brake ducting for cooling.
- 5.5.13 Wheels/Steering – Any steel or alloy wheel up to 6 inch width and of 14 inch diameter; any steering wheel can be used.
- 5.5.14 Tyres – Any moulded treaded tyre; maximum tyre size is 185/60 x 14.
- 5.5.15 Minimum Weight Limit – Including driver 930kg
- 5.5.16 Fuel Tank can be replaced by alternative type in any location.

## 5.6 Class B

FIA Homologated MGBs can run in Class B, supported by and complying with the relevant papers produced to the Technical Officer. Original MGBGTV8 can run in Class B complying with standard class regulations except tyres which must comply with Class B and telescopic shock absorbers are permitted. MGZR170 conforming to MGCC Trophy Championship Regulations can run in Class B, there is no requirement for the engine and gearbox to be sealed. Rover BRM conforming to MGCC ZR170 Trophy Championship Regulations, but with original limited slip differential, can run in Class B. MGZS Turbo Diesel can run in Class B, boost is free, tyres must conform to Class B, all other regulations as Class C MGZS. MGZS 4 cylinder petrol can run in Class B, engine, gearbox, differential and weight limit to the same specification as ZR170, tyres must conform to Class B, all other regulations as Class C MGZS.

### Class B – MGB and Midgets

- 5.6.1 Bodywork – As 5.7.1, but removal of windscreen, hard or soft-top, and side windows is prohibited. Side windows may be of alternative material and quarter lights may be removed.
- 5.6.2 Engine – Permitted Modifications – As 5.7.2, 5.7.3, 5.7.4, 5.7.5.
- 5.6.3 Exhaust System – As 5.7.6
- 5.6.4 Ignition System – Must use a distributor driven by the camshaft. Electronic ignition is allowed, but engine management systems using electronic circuits are not permitted. Advance and retard must be by mechanical means
- 5.6.5 Fuel Pump – As 5.7.8.
- 5.6.6 Suspension – As 5.7.9 except that rear leaf springs must be used, functional and attached to the rear axle with U bolts.
- 5.6.7 Transmission – As 5.7.10, but back axle casing must be original.
- 5.6.8 Electrics – As 5.7.11.
- 5.6.9 Brakes – As 5.7.12.
- 5.6.10 Wheels and Steering – As 5.7.13.
- 5.6.11 Tyres – Any moulded treaded tyre may be used as long as they fit onto the 6 inch rim according to manufacturer recommendations.
- 5.6.12 Minimum Weight Limits – MGB 910 Kg including driver; Midget 690 Kg including driver.
- 5.6.13 Fuel Tank – as 5.8.16

## 5.7 Class C

MGZR190, MGF and MGTF conforming to MGCC Trophy Championship Regulations 2013 can run in Class C, there is no requirement for the engine and gearbox to be sealed and any make of tyre may be used. MGF and MGTF can use Kent Cams LE1815 camshafts and any ECU. MGZR170 conforming to MGCC Trophy Championship Regulations can run in Class C fitted with any tyre. MG Midget and MGB fitted with K Series engine using fuel injection and alternative gearbox can run in Class C, but must conform to bodywork, cooling, exhaust, ignition, fuel pump, suspension, electrics, brakes, wheels, tyres, weight and fuel tank regulations.

### Class C - MGB, MG Midget.

- 5.7.1 Bodywork - Modifications Permitted – Alternative material external panels conforming with the original shape of the car; alternative material doors with lateral door bars; removal of bumpers; replacement of windscreen by aeroscreen; removal of all glass; ventilation holes in bonnet or wings up to 5% of their surface area; flared wheel arches; deforming or partial removal of inner wheel arches; removal of inner front wing (Midget and MGA only); replacement of dashboard; removal of carpets, trim, passenger seat; replacement of drivers seat with non original. Modifications Prohibited – removal or deformation of metal from floor pan between front and rear axles; removal of inner body panels including chassis legs and boot floor.
- 5.7.2 Engine – Modifications Permitted – Balancing; gas flowing; removal of metal; replacement of flywheel, pistons, con rods, valves, push rods, valve springs, rocker gear, camshaft and crankshaft with non original parts; boring to free over bore on original centres; Midget can use Ital or Marina

- block; MGA can use MGB cylinder block and head. Modifications Prohibited – Alteration of stroke; use of non- original cylinder blocks and heads; dry sumping.
- 5.7.3 Engine must be located in original location using original mountings.
- 5.7.4 Oil and Water Cooling – any type of water and oil radiator can be used; electric fan can be fitted; mechanical fan can be removed; thermostat can be removed.
- 5.7.5 Induction System – Any carburettors and manifolds can be used.
- 5.7.6 Exhaust System – Any system can be used; it must run under the car, can exit at the side or the rear and must conform with MSA noise regulations.
- 5.7.7 Ignition Systems – Any electronic system can be used, distributor may be removed.
- 5.7.8 Fuel pump may be changed to non- original in alternative location.
- 5.7.9 Suspension – Permitted Modifications – Front Suspension can use telescopic shock absorbers: Midget can use MGB shock absorber or fabricated top arm using the same fixing and pivot points as the standard shock absorber; the wishbone pan can be altered; all bushes can be replaced with alternative material; top trunnions can be non - original; front springs can be non - original; camber angles can be changed; anti roll bars of any dimension can be used; anti roll bar links can be non - original. Rear Suspension – springs can be modified; additional axle locating bars added; rear anti roll bar added; rear shock absorbers can be changed to non - original and used with coil springs. Rear leaf springs may be removed.
- 5.7.10 Transmission – Permitted Modifications – gearbox casing, gears and gear ratios can be non-original, with a non sequential change; bellhousing, clutch and clutch release mechanism can be non- original; alternative design half shafts can be used; differential and back axle casing can be non original.
- 5.7.11 Electrics – Permitted Modifications – Any type of battery in any location can be used.
- 5.7.12 Brakes – Permitted Modifications – Front discs, pads, calipers and hoses can be non - original; rear drums, shoes, and wheel cylinders can be non - original; brake bias systems are allowed; pedal box and master cylinders can be non - original. Prohibited Modifications – rear disc brakes and ventilated front discs.
- 5.7.13 Wheels/Steering – Any wheels may be used, rim widths are restricted to 6 inches; diameter must be standard or standard plus 1 inch; steering column may be shortened; any steering wheel can be used; track rod ends can be non - original.
- 5.7.14 Tyres – Any racing tyre may be used as long as they fit onto 6 inch rims according to manufacturer recommendations.
- 5.7.15 Minimum Weight Limits – including driver MGB 850 kg; Midget 650 kg.
- 5.7.16 Fuel Tank can be replaced by alternative type in any location.

## **5.8 Class C MGZS Four and Six Cylinder Saloons**

- 5.8.1 Bodywork – Permitted Modifications – Alternative material exterior panels conforming with the original shape of the car; seam welding; alternative material doors; replacement of side and rear glass with alternative transparent material; replacement of dashboard; removal of carpets, trim, passenger seat; replacement of drivers seat with non original. Removal of air conditioning system. Removal of non body coloured part or rear MK2 bumper; removal of inner headlight to provide cold air inlet; reshaping of inner wheel arches to give tyre clearance; removal of spare wheel well; removal of rear wiper and motor, fitting of non-original wing mirrors.
- 5.8.2 Engine – Permitted Modifications – Four cylinder engine to ZR190 specification; V6 engine alternative camshafts – duration inlet and exhaust valves 260 degrees, valve lift inlet and exhaust 9.65mm, inlet full lift 110 degrees atdc, exhaust full lift 114 degrees btdc ; vernier adjustment of camshafts; use of non-original valve springs and collars; lightening of flywheel or replacement with non-original; replacement of inlet manifold; replacement of air box; alternative engine mountings; sump baffles; modification or replacement with non-original oil pump system; sump guard made of metal may be fitted no larger than covering the underside of the engine.
- 5.8.3 Exhaust System – Permitted Modifications – Alternative system, but an operational catalytic converter must be fitted.
- 5.8.4 Oil and Water Cooling – Permitted Modifications – Any type and size of water radiator, water pump, thermostat and thermostat housing; oil cooler may be added.
- 5.8.5 Ignition System – Permitted Modifications – Any ECU may be used.
- 5.8.6 Suspension – Permitted Modifications – Alternative, adjustable front and rear springs, shock absorbers, bushes, ball joints, track rod ends and drop links; adjustable front top wishbones; replacement of front and rear joints with rose joints/spherical bearings; front and rear lower brace; front and rear strut

braces; adjustable rear top arms; strengthening and lightening of rear trailing arms and alternative rear lower arm; reinforcement of rear anti roll bar; removal of front and/or rear anti roll bar.

5.8.7 Transmission – Permitted Modifications – Alternative gears, CWP and differential of any type; alternative clutch operating mechanism: non-original driveshafts made to original specification.

5.8.8 Electrics – Permitted Modification – Any battery type can be used fitted in any location; wiring loom may be modified.

5.8.9 Brakes – Permitted Modifications – Removal of ABS pump; addition of adjustable brake balance bar; alternative material brake pipes; alternative front brake calipers using up to four pistons; alternative material front and rear brake pads; alternative brake discs of any size: addition of brake cooling ducts; addition of brake brace bar; Alternative brake master cylinder STC441 and servo unit GSM 90166.

5.8.10 Wheels/Steering – Alternative steering wheel; any road wheel made to original dimensions with standard offset; front wheel spacers up to 10mm are permitted; replacement of wheel studs with non-original; power steering may be disabled and pipes and reservoir removed but pump must remain in place.

5.8.11 Tyres – Any racing tyre which fits standard sized rims.

5.8.12 Weight Limit – Minimum 1040 kg including driver.

5.8.13 Fuel Tank – Permitted Modifications – Non-original fuel tank; fuel tank may be moved into the boot or rear seat area and must be protected by a firewall; additional fuel pump with swirl pot.

## **5.9 Class F MGF and MGTF**

5.9.1 Bodywork – Permitted Modifications – Alternative material front wings, headlamp body and transparent material, bonnet and boot, front splitter and rear spoiler, side windows, sub frame bushes, seam welding of body and sub-frames and strengthening of suspension mountings using additional metal, alternative sub frame mountings, parcel shelf removal, radio removal, carpets, trim and passenger seat can be removed, window winding mechanism and motor, power steering motor, heater and associated pipes may be removed, pedals can be modified, drivers seat can be replaced. Cars may run open or with any design of hard top. MGTF cross braces may be fitted to MGF front subframe/under dash/engine bay.

Ventilation holes may be cut in front bonnet up to 5% of the surface area.

5.9.2 Engine – Permitted Modifications – Machining of cylinder head, alternative air filter and cold air ducting, oil cooler, alternative clutch cover and plate, lightened flywheel with a minimum weight of 2.8 kg, 52mm throttle body.

5.9.3 Exhaust System – Permitted Modifications – Exhaust system including manifold can be replaced with non-original, but an operational catalytic converter must be fitted.

5.9.4 Ignition System – Permitted Modifications – MEMS2 or MEMS3 can be used. “superchipping” is permitted.

5.9.5 Suspension – Permitted Modifications – front and rear dampers (and springs for MGTF) can be replaced, front and rear suspension knuckles and hydrogas pistons may be modified, front and rear hydrogas restrictor units can be used, interconnecting hydrogas connecting pipes can be removed, spacer may be fitted between the washer and tie bar bush on either side of the rear lower arm, suspension bushes of any material may be used, bump stops may be modified. For MGF, after market springs and dampers can replace the hydrogas units.

5.9.6 Transmission – Permitted Modifications – Reduction of length of gear lever, replacement of ball joints with rose joints, alternative material bushes in gearbox steady bar.

5.9.7 Electrics – Permitted Modification – Any battery type can be used fitted in original position.

5.9.8 Brakes – Permitted Modifications – Alternative brake pads and maximum size 240mm discs using original single piston calipers, alternative brake shields, ABS can be disabled, alternative hoses, the handbrake mechanism may be removed.

5.9.9 Wheels/Steering – Permitted Modifications – Any standard production wheels (MGF must use MGF wheels, MGTF must use MGTF wheels), alternative steering wheel, alternative ratio steering rack, EPAS can be disabled by removal of fuse, steering lock must be disabled or removed.

5.9.10 Tyres – Any moulded treaded tyres, except those marked for competition use only.

5.9.11 Weight Limit – Minimum 1,020 kg including driver.

5.9.12 Fuel Tank – No permitted modifications.