



# Millers Oils Toyota MR2 Championship 2015

## Sporting & Technical Regulations



PUBLISHED VERSION - Page 1 of 6 - Issued 03/02/15

### 1: SPORTING REGULATIONS - GENERAL

#### 1.1: TITLE & JURISDICTION:

The **MILLERS OILS MR2 CHAMPIONSHIP** is organised and administered by the 750 Motor Club Ltd 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. **MSA Championship Permit No:** CHR2015/R027
2. **MSA Championship Grade:** C.
3. **Race Status:** Clubmans / National B.

#### 1.2: OFFICIALS:

1. **Co-Ordinator:** G.Groombridge, The Conservatory Suite, Donington Park, Castle Donington, Derbyshire, DE74 2RP

☎ 01332 814548; ✉ [giles@750mc.co.uk](mailto:giles@750mc.co.uk).

2. **Eligibility Scrutineer:** M. Lambkin-Smith

3. **Championship Stewards:**

R.Knight                      C. Emmerson                      I.Sowman

#### 1.3: COMPETITOR ELIGIBILITY:

1. Entrants must:
  - (a) be fully paid up valid membership card holding members of the 750 Motor Club and
  - (b) be Registered for the Championship and
  - (c) be in possession of a valid MSA Entrants Licences.
2. Drivers and Entrant/Drivers must:
  - (a) Be current Members of the 750 Motor Club and
  - (b) be Registered for the Championship and
  - (c) be in possession of valid Competition (Racing) National B Licence, as a minimum
  - (d) A professional driver, in possession of a valid Licence (featuring an E.U. flag) and medical, issued by the ASN of a member country of the European Union, or comparable country. ((H)26.2.1. applies)
  - (e) If participation in the Championship requires absence from education a driver, in full time school education is required to have the approval of their head teacher and a letter stating such approval from their school in order to fulfil registration for the Championship. A driver shall not take time out of their education to participate in motor sport without the prior written approval of their education establishment.
3. All necessary documentation must be presented for checking at all rounds when signing-on.

#### 1.4: REGISTRATION:

1. All competitors must register for the championship by returning the Registration Form with the Registration Fee to the Coordinator prior to the Final Closing date for the first round being entered.
2. The Registration Fee is £120 payable upon registration.
3. Registration numbers will be the permanent Competition number for the Championship.

#### 1.5: CHAMPIONSHIP ROUNDS:

The **MILLERS OILS MR2 CHAMPIONSHIP** will be contested over the following rounds:

Date	Circuit	Round/s
29 March	Donington Park	2
26 April	Brands Hatch	2
24 May	Croft	2
21 June	Cadwell Park	2
19 July	Anglesey	2
23 August	Silverstone Int	2
13 September	Snetterton 300	2
4 October	Donington Park	2

#### 1.6: SCORING:

1. **Both Overall and Class Points will be awarded to Competitors listed as classified finishers in the Final Results as follows:- 25; 22; 20; 18; 16; 14; 12; 11; 10; 9; 8; 7; 6; 5; 4; 3. All other finishers 2. All starters who fail to finish 1. Fastest Lap 1 Point.**
2. The totals from all qualifying rounds run (excluding any races which are abandoned and which are not replaced) less 2 will

determine the final championship points positions.

3. Ties shall be resolved using the formula in (W)1.3.4. in the current MSA Yearbook.
4. Where the race distance has been reduced (2.6.) it shall still count as a full points scoring round.
5. Competitors not registered for the Championship may be permitted on an individual round basis and will:
  - (a) be deemed "Guest Competitors"
  - (b) not score points and for the purpose of points scoring will be ignored
  - (c) qualify for Event awards
  - (d) comply with the eligibility criteria as prescribed in Article 1.3. above, with the exception of 1.3.1. (b) and 1.3.2. (b), as appropriate
6. Where two drivers are registered in the Team Challenge and are sharing a car, their points scored (as per 1.6.1) will be combined and they will compete for the Team Challenge Awards as per 1.7.3. Each driver must contribute at least 4 scores to the team total.

#### 1.7: AWARDS:

1. All awards are to be provided by the Organising Club unless agreed otherwise.
2. Per Round: Trophies to 1st, 2nd and 3<sup>rd</sup> in each class.
3. Championship: Trophies, subject to a minimum of 5 race starts, to:-
  - 1<sup>st</sup> 2<sup>nd</sup>, 3<sup>rd</sup> overall and 1st, 2<sup>nd</sup>, 3<sup>rd</sup> in each class.
 Best Prepared car.  
 Highest Placed Novice  
 Team Challenge trophy for the team with the highest scores as described in 1.6.6.
4. Presentations: Awards will be presented at the end of each event, and/or at the end of the Championship at the designated presentation ceremony.
5. Entertainment Tax Liability: {deleted}
6. If Provisional Results or Championship Tables are revised after any presentations and these revisions affect the distribution of awards the Competitors concerned must return them to the organisers in good condition within 7 days.

### 2: CHAMPIONSHIP EVENT MEETINGS & RACE PROCEDURES

#### 1. ENTRIES:

1. Competitors are responsible for sending in correct and complete entries with the correct entry fee prior to the closing date for entries before each event.
2. 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.
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.
4. The Entry Fee for each event shall be specified in the SRs and on the entry form.
5. Reserves will be listed in the Final List of Entries published with Final Instructions or in a Bulletin.

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. QUALIFICATION PRACTICE:

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. 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).
3. At Double Header Meeting, the Grid for Race 2 will be set by the fastest lap times from Race 1.

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



applies)

### 5. STARTS:

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. The start will be via Standing start. The minimum Countdown procedures/audible warnings sequence shall be:-
  - I. 1 minute to start of Green Flag/Pace Lap - Start Engines/Clear Grid.
  - II. 30 Seconds - Visible and audible warning for start of Green Flag/Pace Lap.
  - III. A five second board will be used to indicate that the grid is complete.
  - IV. The red lights will be switched on five seconds after the board is withdrawn.
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.
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 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.
5. In the event of any starting lights failure the Starter will revert to use of the National Flag.

**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.

### 7. PITS, PADDOCK & PITLANE SAFETY:

1. Pits & Paddock: Competitors must ensure that the MSA, Circuit Management and Organising Club Safety Regulations are complied with at all times.
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.
3. Refuelling: May only be carried out in accordance with the MSA General Regulations, the Organising Club Regulations, Circuit Management Regulations and the SRs or Final Instructions issued for each Circuit/Meeting.
4. Speed Limit: Pit Lane Speed Limit will be 60 km/h.

**8. RACE FINISHES:** After taking the Chequered Flag drivers are required to:

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

**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.)

**10. TIMING MODULES:** The 750 Motor Club utilises AMB transponder-based timing and competitors must have a compatible transponder fitted and working and advise the race organisers of its number prior to the event. The transponder is a TRANX 260 Direct Powered and is available from HS Sports Ltd – 01260 275708.

**11. QUALIFICATION RACES:** If any event is oversubscribed the Organising Club may at their discretion run Qualification Races.

### 12. OPERATION OF SAFETY CAR: {deleted}

**13. ONBOARD CAMERAS:** All competitors are required to carry an on board in car camera with a wide angle lens that records to an SD card in a minimum resolution of 720p. Footage from the cameras may be used where there is an incident which is subsequently brought before the Clerk of the Course for investigation. The decision to review any such video footage is at the discretion of the Clerk of the Course, the Stewards of the Meeting, the Championship Stewards or the Championship organisers.

- (i) It is the competitor's sole responsibility to ensure safe installation and effective operation of the camera equipment. At all times cameras must be fitted in accordance with MSA Regulations and be approved by the Chief Scrutineer in accordance with J.5.20.5
- (ii) Cameras must mounted in a central to left position with the steering wheel and front windscreen in clear view
- (iii) In the event that no data is available on request (other than due to a proven defect with the equipment) sanctions may be applied which can include but are not limited to exclusion from the Championship or a fine of up to £500. The burden of proof to establish the cause of such failure will lie with the competitor.

### 3: SPECIFIC CHAMPIONSHIP REGULATIONS

In the event of any rounds being oversubscribed the Organising Club may, in liaison with the Championship Coordinator, at their discretion run Qualification races as per 2.11 of these regulations. Alternatively at double header race meetings, should there be sufficient space within the timetable, the Organising Club may divide the grid after qualifying into 3 separate Groups. The Groups will then form 3 races whereby each competitor participates in two races. All 3 races will be eligible for full championship points.

### 4: SPECIFIC CHAMPIONSHIP PENALTIES:

In accordance with Section C of the current MSA Yearbook

#### 4.1: INFRINGEMENT OF TECHNICAL REGULATIONS:

1. Arising from post practice Scrutineering or Judicial Action: Minimum Penalty: The provisions of MSA Regulations: C3.3.
  2. Arising from post race Scrutineering or Judicial Action: Minimum Penalty: The provisions of MSA Regulations: 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).

#### 4.2: ADDITIONAL SPECIFIC CHAMPIONSHIP PENALTIES:

None

### 5: TECHNICAL REGULATIONS

#### 5.1: INTRODUCTION:

- a) 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 must work on the principle that you cannot. The fact that some modifications are mentioned as prohibited does not imply that others are allowed.
- b) **STANDARD:** The word 'standard' used within these technical regulations as a description of components is to be interpreted as per 'Standard Part' defined in Section B – Nomenclature & definitions in the MSA Blue Book. Checking will be by comparison to spare parts supplied by the manufacturer's official agent or by any other means necessary to ensure compliance. It applies to the specified component/s from the manufacturer's parts list for the model / engine shown on the entry form or registration form. No modifications permitted beyond the repair or adjustment processes specifically specified by the manufacturers' workshop manual or microfiche.' Checking will be by comparison to spare parts supplied by the manufacturer's official agent or by any other means necessary to ensure compliance. Where specifications for parts (e.g camshaft, final drive, gear ratios, anti-roll bars etc) are stated within



table 6.3 of these regulations, they are mandatory for that make and model of car.

c) **STANDARD PATTERN:** The words 'standard pattern' used within these technical regulations as a description of components is to be interpreted as per 'Standard Pattern Part' defined in Section B – Nomenclature & definitions in the MSA Blue Book. Checking will be by comparison to spare parts supplied by the manufacturer's official agent or by any other means necessary to ensure compliance.

d) Homologation papers, including VO, VK or ES extensions, will not be accepted as proof of specification of any components.

### 5.2: GENERAL DESCRIPTION

The Millers Oils Toyota MR2 Championship is open to competitors participating in the normally aspirated UK and Japanese domestic models of the mk1, mk2 and mk3 Toyota MR2. All vehicles must be of sound construction and mechanical condition and well maintained. There is no requirement for an MOT certificate, Road Fund License or Insurance.

Cars will run in three classes:-

Class A: Toyota MR2 mk1 - [AW11](#)

Class B: Toyota MR2 mk2 - [SW20](#)

Class C: Toyota MR2 Roadster / MR-S mk3 - [ZZW30](#)

The MR2 Championship regulations are intended to allow competitors to produce race cars that are safe, affordable and of a near identical level of performance, with the emphasis firmly placed on driver ability. Competitors are therefore asked to keep this in mind when building or modifying race cars and are encouraged to seek guidance from the Championship Co-ordinator where appropriate. A modification that gives a performance advantage at a high financial cost will almost certainly be illegal, or possibly outlawed in future regulations.

### 5.3: SAFETY REQUIREMENTS

**5.3.1 Roll Over Protection System (ROPS) (MSA Yearbook section K1):**  
- Class A cars may use either a cage with six points of attachment as shown in MSA drawing K6 / K6a or a suitably homologated five point cage. Either cage must be equipped with compulsory side entry bars on both the driver and passenger side of the vehicle.

- Class B cars must use a cage with six points of attachment as shown in MSA drawing K6 / K6a equipped with compulsory side entry bars on both the driver and passenger side of the vehicle.

- Class C cars must use a cage with six points of attachment as shown in MSA drawing K6 / K6a equipped with compulsory side entry bars on both the driver and passenger side of the vehicle. Optionally, an additional two points of attachment (bringing the total to eight) may be made at the front of the cabin as per MSA drawing K11.

For all classes: cages may only be secured by their mounting feet, and all mounting points must be contained within the confines of the cabin.

**5.3.2 Fire Extinguisher (MSA Yearbook section K3):**

A plumbed in fire extinguisher of minimum 2.25 litre capacity as per MSA regulations K3.1.2(a) or K3.1.3 must be securely installed. Nozzles must be positioned so that the extinguisher discharges both into the cabin and engine bay. Mounting location is free but competitors are advised to position the extinguisher in such a manner that it can be easily accessed by scrutineers, and armed / disarmed. Mechanical or electrical triggering mechanisms must be fitted such that the extinguisher can be operated both externally and by the driver whilst normally seated. The external fire extinguisher trigger must be situated adjacent to the external circuit breaker trigger.

**5.3.3 External Circuit Breaker (MSA Yearbook section K8):**

A circuit breaker must be fitted that when activated isolates all electrical circuits with the exception of those that operate a fire extinguisher. A trigger for the circuit breaker must be located externally, either at the base of the windscreen forward of the cabin, or on class A and B cars behind the flying buttresses rearward of the cabin.

**5.3.4 Identification Decals:**

The external fire extinguisher trigger must be marked by the letter "E" in red inside a white circle of at least 10cm diameter with a red edge. The external circuit breaker trigger must be identified by a Red Spark on a White-edged Blue triangle (12cm base), and the 'On' and 'Off' positions clearly marked. If the triggers are installed behind the flying buttresses on class A and B cars then identification decals must be installed on both sides of the buttress.

**5.3.5 Red Warning (Rain) Light (MSA Yearbook section K5):**

As per MSA yearbook regulation K5.1, all classes must have one of the following installed:

- A single high intensity red LED warning light located within 10cm of the centre line of the vehicle. The original equipment high level brake light on Class B cars may be used for this purpose.

- Two high intensity red LED warning lights equally located about the centre line of the vehicle.

**5.3.6 Harness and Seat (MSA Yearbook section K2):**

A minimum four point harness as per MSA regulation K2.1.2 must be installed. A six point harness is strongly recommended. A non reclining competition seat as per MSA regulation K2.2 must be fitted.

**5.3.7 Towing Eyes:**

Substantial towing eyes with an internal diameter of at least 60mm must be fixed securely to the main structure of the vehicle, front and rear, within the confines of the body. They may be of a rigid or flexible material and must be of a bright contrasting colour.

**5.3.8 Locking Mechanisms:**

The driver and passenger interior door locks must be disconnected and rendered inoperable from inside the vehicle - they may still operate externally using a key. Central locking switches must be disabled. The original equipment catches for the bonnet and engine bay cover must be removed and these areas must be secured in the closed position using only externally accessible bonnet pins.

### 5.4: GENERAL TECHNICAL REQUIREMENTS & EXCEPTIONS

All cars must comply with the requirements of sections J and Q19 of the MSA Yearbook unless otherwise specified within these technical regulations. All vehicles must be of sound construction and mechanical condition and be well maintained. There is no requirements for vehicles to meet MOT standards. Exceptions to some regulations may be made to accommodate drivers with disabilities but must be agreed with the Championship Co-ordinator.

### 5.5: CHASSIS

No chassis stiffening is permitted except that derived from installation of the roll cage. Seam welding of the shell is prohibited. Only original equipment factory fitted strut braces may be installed.

### 5.6: BODYWORK

**5.6.1. Windows:**

All windows must be installed and of original equipment specification laminated glass. The addition of a colourless safety film to the glass is permitted. Glass sunroof or T-bar panels are not permitted and must be removed or replaced with a non-shattering material, as per MSA Yearbook regulation Q19.14.6. If installed, a sunroof must be firmly



secured in the closed position. Electric window winding mechanisms may be replaced by original equipment manual winding mechanisms. The driver side window must be capable of being fully opened and closed by the driver whilst seated. The passenger window may be installed in the permanently closed position and its winding mechanism removed.

#### 5.6.2. Mirrors:

An interior rear view mirror must be installed on the centre line of the windscreen in the original location. This may be a standard or aftermarket mirror. Additional rear view mirrors may be installed on the inside of the windscreen provided that they do not impede the view of the driver or any mandated video recording equipment. The original equipment wing mirrors must be retained. Factory fitted folding wing mirrors must have the facility to retract electrically rendered inoperable.

#### 5.6.3. Interior:

With the exception of the original dashboard and instrument binnacle, all interior systems and trim may be removed. This includes (but is not limited to) carpets, sound deadening material, roof lining, heating, ventilation and air conditioning system, audio equipment, alarm systems, passenger seat, centre console, glove box and centre tunnel cover. Material may be removed from the dashboard only to allow fitment of the roll cage. If the interior door panels are removed they must be replaced with aluminium sheeting - this must be executed to a high standard with no sharp edges and a smooth finish. The standard toolkit must be removed. The factory supplied "spacesaver" spare wheel may be removed, retained or replaced with a full size standard wheel and tyre fixed in the standard location using either the original equipment fixing or a suitable metal plate and heavy duty bolt. Additional instruments are permitted. Steering wheels are free. Airbags must be removed. An effective windscreen demisting solution must be installed.

#### 5.6.4. Exterior:

No modification is permitted to the outer skin of any body panel by the addition, removal or deformation of material. Inner webbing or strengthening material may be removed, providing that this does not compromise the integrity of the outer skin. Replacement body panels must be of original shape, material and thickness.

- Class A and B cars may use any rear spoiler design originally factory fitted to their chassis or remove the spoiler entirely. Fibreglass replicas to the original equipment design may also be used.

- Class C cars may be fitted with front and rear bumper extensions, side skirts and spoilers provided that these parts were originally supplied as Toyota dealer fit options. Fibreglass replicas to the original equipment design may also be used.

The bonnet, engine bay cover and boot lid must follow the vehicles original shut lines and must not have any non-standard gaps at their edges when fully closed. The fitment of tape, sealant or addition of any material to close body gaps is prohibited. The original number of wiper arms and blades must be retained and be fully functional, although the type of blade is free. Washer pump, bottle, piping and nozzles may be removed. All weather strips and channels must be retained.

### 5.7: ENGINE

#### 5.7.1 Permitted Engines:

All classes must be fitted with the original factory engine as listed below. Where an engine is sourced from a different Toyota model, it must be of identical specification.

- Class A: Toyota 4AGE1.6 litre
- Class B: Toyota 3SGE 2.0 litre excluding BEAMS VVTI variant
- Class C: Toyota 1ZZFE 1.8 litre

If the following regulations do not explicitly specify that a part may be used or modification made then you should work on the principle that it cannot. It is the competitors responsibility to ensure that no prohibited parts have been used or modification carried out regardless of who has assembled the engine. In all instances, Toyota's workshop manuals will be used for reference. Where parts are specified in Toyota workshop manuals as being available from Toyota and used in the normal repair of an engine (such as oversized pistons) then such parts shall be considered standard.

No modifications are permitted beyond the repair or adjustment specified by the manufacturers workshop manual. Standard or standard pattern parts to original specification must be used.

Crankshaft main and big end bearings are free. All covers must be retained.

#### 5.7.2 Location:

Position and mounting method must be standard for the model being raced. Bushes may be standard or polyurethane. No additional engine or transmission supports may be fitted.

#### 5.7.3 Oil / Water Cooling:

Coolant radiators must remain standard in capacity and position but are otherwise free. Oil coolers are only permitted if standard for the model being raced.

#### 5.7.4 Induction Systems:

Forced induction is not permitted. The induction system up to but not including the throttle body is free and must be contained within the engine bay. Class A cars may also use the boot area. Any ducting must remain within the confines of the body. The crankcase breather may vent directly to a catch can. No other modifications are permitted.

#### 5.7.5 Exhaust Systems:

Exhaust systems must exit at the rear of the vehicle. Class A and B cars must retain the standard exhaust manifold which may not be modified. Class C cars: exhaust manifold is free but must remain compatible with the standard "B" pipe. Flanges must be to the same pattern as standard and occupy the same point in space. Class C cars must also be fitted with a catalytic converter which may be standard or aftermarket. For all classes, the remainder of the exhaust system including silencers is free. Exhaust Gas Recirculation systems may be removed and / or rendered inoperable.

All vehicles must comply with the relevant maximum noise limits set out in MSA Yearbook section J5.18.

#### 5.7.6 Ignition Systems:

The standard ECU for the model being raced must be fitted and may not be modified. It is not permitted to intercept and modify the engine control signals in any way. Diagnostic connectors must remain present and functional. Class A and B cars must be capable of entering static timing mode. Class C car must be capable of communicating with a diagnostic scan tool.

Plug leads and spark plugs are free. For class A and B cars, base ignition timing must be set at or between 10 and 13 degrees before top dead centre.

#### 5.7.8 Fuel Delivery Systems:

It is permissible to replace the fuel pump, fuel lines and filter with standard parts only. It is permitted to add dry break fuel sampling solution as described in MSA yearbook section J5.13.7.

### 5.8: SUSPENSION

#### 5.8.1. Permitted Modifications:

All Classes: The original suspension configuration must be retained. Anti-roll bars are free but must not be adjustable by the driver whilst seated. Whiteline adjustable camber bolts supplied by the Championship Organiser and Toyota offset camber bolts may be used. Standard or polyurethane suspension bushes are permitted. It



is permitted to alter the ride height. No part of the car excluding the the exhaust system may be below a horizontal plane passing 65mm above the ground, the car being in normal racing trim and the driver being seated in full race gear. The vehicle may be stationary or moving during any testing.

Class A Cars: Dampers are free but must be of the same type as originally fitted and offer no adjustment that was not previously available. Damper bumpstops are free but must be fitted. It is intended that all classes will eventually run specified dampers and for this reason competitors are encouraged to use off-the-shelf rather than custom solutions. Uprated / lowered springs are permitted provided that they are the same outside diameter of the standard coil and are made from one continuous length of wire. Adjustability of suspension geometry is limited to that provided by the vehicle manufacturer for the original suspension except camber, which may be no more than 3 degrees negative.

Class B Cars: Dampers may be only of the following type:

Standard Toyota

Bilstein Toyota (Black)

Bilstein B6 (Yellow)

No modification may be made to the Bilstein dampers. Standard Toyota dampers may have their oil changed and the specification of that oil is free - no other modifications are permitted. Damper bumpstops are free but must be fitted. Uprated / lowered springs are permitted provided that they are the same outside diameter of the standard coil and are made from one continuous length of wire. Adjustability of suspension geometry is limited to that provided by the vehicle manufacturer for the original suspension except camber, which may be no more than 3 degrees negative.

Class C Cars: May run to either of the following:

Dampers are free but must be of the same type as originally fitted and offer no adjustment that was not previously available. Damper bumpstops are free but must be fitted. Uprated / lowered springs are permitted provided that they are the same outside diameter of the standard coil and are made from one continuous length of wire. Adjustability of suspension geometry is limited to that provided by the vehicle manufacturer for the original suspension except camber, which may be no more than 3.5 degrees negative.

or:

BC Racing BR series type RA adjustable coilover kit comprising dampers, springs and top mounts. Spring rates must be 5kg/mm front and 7kg/mm rear. Only the adjustment made by the original suspension components and the coilover kit may be made except camber, which may be no more than 3.5 degrees negative. No component may be modified or omitted.

5.8.2. Prohibited Modifications:

Modifications to the suspension pick-up points are prohibited; this includes the slotting of suspension strut mounting points. Any modification which prevents a wheel from reach the standard fully dropped position is prohibited.

5.8.3. Wheelbase and Track:

The wheelbase and track must be standard for the model being raced.

### 5.9: TRANSMISSION

5.9.1. Permitted Modifications.

Standard manual gearbox for the model being raced must be used. Clutch cover and plate are free.

5.9.2. Prohibited Modifications.

Standard flywheel only is permitted and may not be modified in any way. Only one clutch plate is permitted. The use of electronic traction control devices is prohibited. Any device or modification that alters the throw of the gear lever (such as a short shifter) is prohibited.

5.9.3 Transmission and Drive Ratios.

Class A cars must use UK specification gear ratios, final drive and open differential only.

Class B may use either UK or Japanese standard specification gear ratios, final drive and open differential only.

Class C may use either UK or Japanese standard specification gear ratios, final drive and either the standard open or torsen type limited slip differential only.

### 5.10: ELECTRICS

5.10.1 Exterior Lighting.

All classes must have standard headlights fitted and fully operational in the stock location. Class A and B cars must be capable of fully raising and lowering the headlamps using the standard motors, and they must be secured against glass breakage using tape or transparent film as per MSA yearbook regulation Q9.14.4. Class C cars have plastic lenses and therefore do not require tape or film. Front and rear sidelights and indicators must be fitted in the stock location and be fully operational. Side repeaters need not function and can be removed. Standard rear light clusters must be fitted in the stock location and the brake lights contained within them must illuminate without delay when the brake pedal is pressed. High level centre brake lights need not function and can be removed. Bulbs may be incandescent or LED. High Intensity Discharge lamps are not permitted. Front fog lights must be removed. Integral rear fog lights must be rendered inoperable. In the event of a night race, a pair of auxilliary forward facing spotlights may be fitted to the front of the vehicle.

5.10.2 Battery.

A Battery must be fitted of such capacity that it is capable of repetitively starting the vehicle. The location and type of the battery is free, subject to meeting the criteria set down in MSA yearbook section J5.14. No external batteries may be used.

5.10.3 Generator.

A fully working standard alternator must be fitted and electrically connected so that the standard battery charging function is providing a charge to the onboard battery. The system voltage when measured at the battery terminals must 13v or greater when the engine is running.

### 5.11: BRAKES

5.11.1 Permitted Modifications.

Brake pads must retain their original shape but material choice is free. Standard rubber brake hoses may be replaced with stainless steel braided items. Deformation or removal of the back plates is permitted. The handbrake must remain cable operated and functional. Additional brake ducting is permitted within the overall periphery of the bodywork. Discs may be replaced by standard or standard pattern parts.

Class A - ABS is not permitted.

Class B may remove factory fitted ABS systems and replace them with standard non-ABS components or otherwise disable them electrically. Class C may disable the factory fitted ABS system electrically but may not remove or modify any components.

5.11.2. Prohibited Modifications.

Discs may not be drilled or grooved. Any device that alters the brake bias is prohibited.

### 5.12: WHEELS / STEERING

5.12.1 Permitted Modifications.



Wheels may be standard for the model raced or aftermarket replacements to the same dimensions. Wheels may be refurbished / repainted. Wheel nuts must be steel. Steering wheel is free and may be removable. It is recommended that the steering lock is rendered inoperative in accordance with MSA yearbook regulation Q19.6.

Class A: Standard non-power assisted steering rack only.  
Class B: Either standard non-power assisted steering rack or standard power assisted system may be used. If the power assisted system is used all components must remain in place, but the power assist may be rendered electrically inoperable.  
Class C: Standard power assisted system must be used. All components must remain in place, but the power assist may be rendered electrically inoperable.

#### 5.12.2 Prohibited Modifications.

It is not permitted to alter the wheels by removal of material. Wheel weights may be added for balancing only. Magnesium wheels are not permitted.

#### 5.12.3 Dimensions:

Class A: 5.5" x 14" or 6 x 14", PCD 4 x 100, Offset ET38  
Class B: Front 6" x 15", Rear 7" x 15", PCD 5 x 114.3, Offset ET45  
Class C: Front 6" x 15", Rear 6.5" x 15", PCD 4 x 100, Offset ET45

### 5.13: TYRES

#### 5.13.1 Specification.

The control tyre is the Toyo R888 in GG (Medium Hard) compound. No alteration to the manufacturers specification is permitted, including but not limited to the use of tyre heating / heat retention devices, tyre treatments and compounds cutting, regrooving, buffing or in any other way modifying the tread pattern. The manufacturers data may not be removed from the sidewall of the tyre and must remain visible at all times. Only tyres purchased from the nominated supplier may be used.

#### 5.13.2 Sizes.

Class A: Front and rear: 185/60/14  
Class B: Front 195/55/15; Rear 225/50/15  
Class C: Front 195/50/15; Rear 205/50/15

#### 5.13.3 Nominated Supplier.

Rogue Motorsport Ltd, Units 5 & 6 Blue Lias Industrial Estate, Rugby Road, Stockton, CV47 8HN  
Telephone 01926 810104, <http://www.roguemotorsport.com>

### 5.14: VEHICLE WEIGHT

Class A: 1000kgs  
Class B: 1200kgs (172bhp engine)  
1050kgs (158bhp engine)  
Class C: 1000kgs

All weights are minimums and include the driver in full racing gear, as measured at the end of a qualifying session or race. Competitors are reminded that the calibrated scales presented at the circuit are considered definitive and are encouraged to check their weights at every round.

### 5.15: FUEL TANK / FUEL

#### 5.15.1 Type.

The standard fuel tank must be used.

#### 5.15.2 Location

The fuel tank must be in the standard location.

#### 5.15.3 Fuel

Only petrol as defined in Section B Nomenclature & Definitions, Pump Fuel a) section of the MSA Yearbook for the current year and complying with BS4040, BSEN228 or BS7800 may be used;

### 5.16: NUMBERS & CHAMPIONSHIP DECALS

#### 5.16.1 Positions

Race Numbers must be displayed on each side of the vehicle alongside the cockpit / driver and on the bonnet of the vehicle. 750 Motor Club decals must be affixed prominently near all number backgrounds.

Championship sponsor decals must be affixed in the positions detailed on any diagram supplied with those decals. 750 Motor Club and Championship sponsor decals must take precedence over any other decals or livery. Competitors displaying decals that conflict with the Championship sponsors may be required to remove them. Failure to comply will render the vehicle and driver ineligible to race. The Championship coordinator's decision is final.

#### 5.16.2 Suppliers

Sponsor and club decals will be available at the first championship race in which the vehicle is entered.