



## 1. SPORTING REGULATIONS - GENERAL

### 1.1 Title & Jurisdiction:

The 2014 TOYO TIRES RACING SALOONS series is a series of standalone races organised and administered by **MotorSport Vision Racing** 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 Series Regulations.

Series Permit: RS2014/015

Race Status: National B

### 1.2 Officials:

1.2.1 Co-ordinator: Julian Newman

1.2.2 Series Scrutineer:

Series Stewards:                      Rick Smith  
    Bill Shewan  
    Mike Dixon  
    Chris Norman

Any three of the above may reach a decision.

1.2.4 Clerk of the Course: Anita Williams

### 1.3 Competitor Eligibility:

1.3.1 Drivers must be racing members of Project 8 Racing Club. They must be in possession of a valid MSA Competition (Racing) NATIONAL 'B' STATUS Licence (minimum) and be members of MSVR. Membership of MSVR is free on entry into any race for the series.

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

### 1.4 Registration:

1.4.1 All drivers must register as competitors for the series by returning the Registration Form with the Registration Fee to the Co-ordinator prior to the Final Closing date for the first race being entered.

1.4.2 The Registration Fee is £100 - Made payable to:- Project 8 Racing Club

1.4.3 Registrations will be accepted from 1st January 2014 until the closing date for entries to the final round.

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

## 1.5 Meetings:

The **TOYO TIRES RACING SALOONS** will be held over 16 Races at the following eight race meetings:

<b>Date:</b>	<b>Circuit:</b>	<b>Organising Club:</b>	<b>Races</b>
26 April	Donington Park (National)	MSVR	2
24 May	Rockingham (ISCC Short)	MSVR	2
28 June	Cadwell Park	MSVR	2
19 July	Oulton Park (International)	MSVR	2
16/17 August	Brands Hatch (GP)	MSVR	2
6 September	Silverstone (National)	MSVR	2
25 October	Snetterton (300)	MSVR	2

1.7 Garlands and Trophies are to be provided for presentation at the end of each race or at an end of the meeting presentation ceremony.

### 1.7.1 Entertainment Tax Liability.

In accordance with current government legislation, Project 8 Racing 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, Project 8 Racing is required to deduct tax at the current rate applicable from any such payments they may make to non-UK residents.

Under certain circumstances, it may be possible for competitors to enter into an agreement with The Inland Revenue to limit the tax withheld. Any application for such an arrangement must be made in writing and not later than 30 days before the payment is due.

For further information contact:- 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.

### 1.7.2 Title to all Trophies:

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

## 2. SPORTING REGULATIONS - JUDICIAL PROCEDURES

2.1 **Rounds:** In accordance with Section C of the 2014 MSA Yearbook and these regulations.

## 3. SPORTING REGULATIONS - SERIES 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 three days before each round.

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 Blank
- 3.1.5 In the event of any rounds being oversubscribed the Organising Clubs, in liaison with the Project 8 Racing 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 Reserve Number order irrespective of class. If Reserves are given Grid Places prior to issue of the first Grid Sheets for any 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 Pitlane and be released to start the race after the last car to take the start has passed the startline or pitlane 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 to be as specified in the MSA Regulations in respect of circuit lengths.

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 series 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 Regulations Q 4.5. 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 Q 4.5.

## 3.5 Races:

The minimum scheduled distance shall be 15 minutes 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.

[The procedure for qualification races is specified in 3.13].

## 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:-

## Standing Start

Start Procedure: **In normal circumstances there will not be a green flag/formation lap.**

1. There will be a minimum elapsed period of 3 minutes from cars being released from the Assembly Area to the start of the race;
2. A 'one minute' board will be shown on the startline; engines should be started at this stage. A '30 second' board will be displayed followed by a '5 second' board;
3. Approximately 5 seconds after this board is withdrawn the red lights will be switched on; after between 2 seconds and 7 seconds they will be switched off to start the race.

**Any change in the above procedure will be detailed in Final Instructions, by bulletin or by drivers briefing.**

- 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 shall be held in the pitlane and may start the race after the last car to take the start from the grid has passed the startline or pitlane exit, whichever is the later.
- 3.6.5 Any drivers unable to start are required to indicate their situation as per MSA Regulation Q12.13.2.
- 3.6.6 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 without overtaking and to return to the starting grid area which will automatically become a Parc Fermé 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%  
Any race stopped after the leader has completed more than two laps but less than 75 % of its duration will be considered as the first part of a two part race. Cars will be restarted from a grid set out in the finishing order derived as in the following point. The result will be the order of finishing at the end of the restarted race, unless series Regulations specify otherwise.
- 3.7.4 Any race stopped after the leader has completed 75% of its duration will be considered to have finished, unless the Clerk of the Course, in consultation with the Stewards of the Meeting, deems it appropriate to restart the race. If not restarted the result will be based on the order of crossing the finish line at one lap less than at the time of first showing the Red Flag. Only cars which are under their own power at the showing of the Red Flag will be classified.

In the interval between stopping and restarting the race cars may return to the pit area for repairs. They may join from the pit road after all the other cars have started. Non-runners at the time of stopping can restart from the pit lane, behind those referred to above. No work may be carried out on the grid unless on grounds of safety and with the approval of the scrutineer. The Clerk of the Course may order that the duration of the second part or re-run of any race shall be of a shorter distance than originally scheduled, or may be abandoned altogether.

### 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 & 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 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 drive at minimum speeds in pit lanes.
- 3.9.3 Refuelling: May only be carried out in accordance with the MSA Q 13 Regulations, Circuit Management Regulations and the SRs or Final Instructions issued for each Circuit/Meeting.
- 3.9.4 Speed Limit Pit Lane Speed Limit will be 60 km/h

### 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 the helmets on and harnesses done up while on the circuit or in the pitlane.

### 3.11 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.

### 3.12 Timing Modules

- 3.12.1 All competitors will be required to fit Electronic Self Identification Modules to their cars for the purposes of accurate timing. It will be the responsibility of the competitor to fit these in the car in the position and manner specified. The Modules must be in place and functioning correctly for all qualifying practice sessions and races. The setting and servicing of these items must only be carried out by properly authorised MSA licensed Timekeepers. Competitors will be charged by the timing company for replacement of the Modules due to misuse or loss at any time during the season.
- 3.12.2 Competitors may not place electronic timing equipment within five metres of the official Start, Finish or any other official timing lines at any event or test session/day. Any such equipment placed within these zones will be removed.

- 3.13 **Qualification Races:** In the event of the need for any qualification races, the procedures will be as published in the Final Instructions for the events concerned.

### 3.14 Operation of Safety Car

- 3.14.1 The Safety Car will be brought into operation to neutralise a race upon the sole decision of the Clerk of the Course. The Safety Car will be driven by an experienced circuit driver and will carry an observer capable of recognising all competing cars and who is in permanent radio contact with race control.
- 3.14.2 The Safety Car, yellow/amber lights illuminated, will normally join and exit the circuit from the pit lane and the Safety Car boards will be shown initially from the start/finish line. If these locations are to be varied specific written instructions and verbal briefings will be issued detailing the exact locations to be used.
- 3.14.3 On the order from the Clerk of the Course, the Safety Car will join the circuit with its revolving lights on, regardless of where the race leader is.
- 3.14.4 When the order is given to deploy the Safety Car a waved yellow flag and "SC" board will be displayed at the start/finish line. The waved yellow flags and "SC" boards will flow around the circuit in both directions, as an adjacent post displays both their waved yellow flag and "SC" board. This system may be supplemented by a message being simultaneously broadcast to all marshals' posts if such a communication system is available.
- 3.14.5 Flashing yellow lights may also be used at the start-line and at other points around the circuit.
- 3.14.6 All competing cars, when notified of the Safety Car intervention (by the flag signals, "SC" boards, or by any other means) will reduce speed and line up behind the Safety Car, no more than 5 car lengths apart, and maintaining the same speed as it. Overtaking or overlapping of any other competing car during a Safety Car intervention is forbidden. Overtaking of a Safety Car is forbidden unless the particular competitor concerned is signalled to overtake the Safety Car by the observer in the Safety Car.
- 3.14.7 When ordered to do so by the Clerk of the Course, the observer in the Safety Car will wave past any cars between the Safety Car and the race leader. These cars will continue at reduced speed and without overtaking until they reach the line of cars behind the Safety Car.
- 3.14.8 While the safety car is in operation, competing cars may enter the pit lane, but may only rejoin the track when signalled to do so and not when the safety car and the line of cars following it are about to pass or are passing the pit exit. A car re-joining the track must proceed at an appropriate speed until it reaches the end of the line of cars behind the Safety Car.
- 3.14.9 The Safety Car will remain in operation until at least the majority of competing cars on the circuit are lined up behind it.
- 3.14.10 When the Clerk of the Course calls in the Safety Car it will extinguish the yellow/amber flashing lights prior to exiting the circuit. This would normally be such that a minimum of 25% of a lap for circuits over 2 miles and 50% of a lap for circuits under 2 miles should be completed by the Safety Car with its lights extinguished.
- 3.14.11 Following the safety car extinguishing its lights, and prior to passing the green flag, the race leader will maintain the pace set by the Safety Car. The race leader will dictate the pace and, if necessary, fall more than five car lengths behind it. In order to avoid the likelihood of accidents before the safety car returns to the pits, from the point at which the lights on the car are extinguished drivers must proceed at a pace which involves no erratic acceleration or braking nor any other manoeuvre which is likely to endanger other drivers or impede the restart.
- 3.14.12 As the Safety Car is approaching the pit entry, the green flag will be displayed at the start/finish line and the "SC" board withdrawn. Following this display of the start signal yellow flags and "SC" boards at the marshals posts will be withdrawn and be replaced with a waved green flag for one lap. The waved green flag will flow around the circuit in both directions, as an adjacent post displays their waved green flag. This system may be supplemented by a message being simultaneously broadcast to all marshals' posts if

such a communication system is available. Overtaking remains strictly forbidden until the start signal at the start/finish line is passed.

- 3.14.13 Each lap covered while the Safety Car is in service will be counted as a race lap unless specified to the contrary in Championship regulations.
- 3.14.14. Under certain circumstances the Clerk of the Course may ask the Safety Car to use the pit lane. In this case, and provided its yellow/amber lights remain illuminated, all cars must follow it into the pit lane without overtaking. Any car entering the pit lane under these circumstances may stop at its designated garage area.
- 3.14.15. Should it be necessary to stop a race during a Safety Car deployment the Safety Car, with all competing vehicles following, will pass through the red flag at the start/finish line, complete one further lap at reduced speed and then, once the Safety Car comes to a stop at a position indicated by the Safety Car observer (which will usually be either the grid or Parc Fermé), all competing cars must stop behind it unless otherwise directed.
- 3.14.16. In exceptional circumstances the following may apply:
- (i) The race may be started behind the Safety Car. In this case its revolving yellow/amber lights will be turned on at the two-minute signal. This is the signal to the Entrants/Drivers that the race will be started behind the Safety Car and it will remain at the front of the grid during the remainder of the countdown. When the Green Flag is shown at the Start/Finish Line, the Safety Car will leave the grid and all cars will follow in single file in grid order no more than 5 (five) car lengths apart. The race will be deemed to have started when the Safety Car leaves the grid and the Green Flag is displayed.
  - (ii) Cars will leave the grid in single file grid order behind the Safety Car under the instruction of the Chief Start/Finish Line Marshal. Cars will remain in single file without overtaking, except that a car that falls behind may regain its grid position if the cars behind it could not avoid passing without unduly delaying the remainder of the field. In this case, Drivers may carefully overtake to re-establish their original starting grid order. If a car falls to the back of the grid, it must remain at the back of the grid.
  - (iii) Any car(s) delayed leaving the grid may not overtake another moving car if stationary after the remainder of the cars had crossed the line. In this case the car(s) shall remain at the back of the grid, in the order they left the grid.
  - (iv) A time penalty or Drive Through Penalty may be imposed on any Driver who, in the opinion of the Clerk of the Course, unnecessarily overtakes another Driver during these laps.
  - (v) The "SC" boards and Yellow Flags will be displayed at Marshals' Signalling Posts around the circuit until the Clerk of the Course withdraws the Safety Car from use in accordance with Regulation 3.14.10, 3.14.11. and 3.14.12.
  - (vi) All laps undertaken in this start procedure will be deemed to be counted as race laps
- 3.14.17. Any car being driven unnecessarily slowly, erratically or which is deemed potentially dangerous to other drivers at any time whilst the safety car is deployed will be reported to the Clerk of the Course. This will apply whether any such car is being driven on the track, the pit entry or the pit lane.

## 4. 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: C 3.3.

#### 4.1.2 Arising from post race Scrutineering or Judicial Action:



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

For infringements deemed to be of a more serious nature the Clerk of the Course and/or Stewards of the Meeting are to invoke the provisions of Regulation C 3.5.1 c).

#### 4.1.3. **Additional specific penalties:**

Infringements of non-technical MSA Regulations and the Sporting Regulations issued for the Challenge in accordance with the 2014 MSA Judicial Procedure Regulations, as amended by these Regulations.

In order to maintain standards of conduct, the series coordinator will monitor all officials/observers reports of adverse behaviour at race meetings. If any individual is included on two such reports during one racing season the series coordinator will notify the organisers who will issue a written warning that his/her driving behaviour is to be specifically observed at future race meetings. Any adverse reports during this period of observation could result in official MSA action & will result in a series steward's enquiry, with possible refusal of further race entries or other sanctions as seen fit.

4.1.4 The Clerk of the Course may impose a Stop & Go or Drive Through penalty for infringements of the regulations in accordance with MSA Regulation Q 12.6.

4.1.5 The Clerk of the Course may impose a grid position penalty for the next race or races of the Series for infringements of the regulations.

4.1.6 The Clerk of the Course may impose such penalties as appropriate according to the powers granted to him in G 5.3.

#### 4.2 **Infringements of non-technical MSA Regulations and the Sporting Regulations:**

As per 2014 MSA Judicial Procedure Regulations.

## 5. TECHNICAL

### 5.1 Introduction:

The following technical regulations are set out in accordance with MSA specified format and it should be clearly understood that if the following texts do not clearly state that you can do something you should seek clarification from the series organisers prior to making any changes.

The organizers reserve the right to modify these series regulations as appropriate to ensure close competitive racing at all times.

### 5.2 Description:

- 5.2.1 "Racing Saloons" are two wheel drive, four seater saloon cars marketed before 1st January 1994, of which more than 5000 examples were manufactured in any 12 month period during the overall production run and/or were homologated by F.I.A. for competition in Group N category for production cars, prior to that date. Cars not homologated in Group N or meeting the above criteria may be eligible subject to series organiser's approval. Such approval must be sought in writing prior to the first race entered. If required, provision of FIA papers is the competitor's responsibility.

In order to widen the appeal of racing in the Project 8 Racing Club's Toyo Tires Racing Saloons, the series is extended to selected 4 seater 2 door sports racing cars and younger cars accepted by specific agreement of the committee. The current registered vehicles list is available from the series organisers on request, but is not intended as an exhaustive list of eligible cars.

In enabling more drivers who wish to race with cars of similar performance to join the series and which will not meet the specific regulations herein, cars will not necessarily sit within the capacity classes shown below. The club committee will determine the relevant class dependant on performance. Entrants and drivers must accept this as a precursor to racing with P8R.

It is the intention of the Project 8 Racing Club to continue to monitor performance of cars in the various classes and reserves the right to make changes during the season which may be required in order to balance performance. These may be, but are not limited to, a change of class, reduction of turbo boost limit, additional weight.

#### Project 8

Saloon cars complying with other Toyo Tires series or championships using any Toyo List 1a, or List 1b Toyo tyres in GG compound are also eligible but must first seek prior approval from the P8R committee.

The responsibility to prove eligibility is that of the entrant at all times. The series organisers in conjunction with the Series Scrutineer shall determine matters as to the eligibility and the implementation which may involve photographing any part of the vehicle and performing electrical diagnostics at the scrutineer's discretion.

- 5.2.2 Unless specifically permitted in these regulations, all components must be to original equipment specification for the model entered.

- 5.2.2 Cars will run in five classes based on production capacity:

Class A Over 2989cc

Class B 2501cc to 2989cc, Cars running to JEC regulations classes E&G,

Rover 220 Tomcats fitted with the Garrett T25 Turbo as used in the original Roversport series.

Class C 2001cc to 2500cc

Class D 1601cc to 2000cc

Class E Up to 1600cc, cars running to JEC regulations classes D&F and cars fully compliant with the Compact Cup Championship regulations.

Class F cars fully compliant with the Production BMW Series regulations  
Class G Reserved for new initiative

The following rules will also be applied **cumulatively**;

- Under 1800cc Forced induction is subject to an equivalency factor of 1.4
- Over 1800cc Forced induction is subject to an equivalency factor of 1.7
- Rotary engines are subject to an equivalency factor of 2.0
- Naturally aspirated cars with 2 valves per cylinder are subject to an equivalency factor of 0.8 if they are between 2000cc and 2500cc and a factor of 0.85 if above 2500cc.
- Diesel engine cars will not be subject to the turbo equivalence and will be treated as 2 valve engines above.

5.2.3 Cars complying with their own series regulations running on Toyo List tyres will run in the classes above based on actual capacity. Perspex windows will not be permitted in any cars unless agreed with the Project 8 Racing Club committee. Other than Cars running to JEC regulations classes E&G, all cars fitted with Perspex Windows will be subject to a 30kg weight increase over the minimum race weight described in 5.1.5 unless specifically waived.

#### 5.2.3 Forced induction

Forced induction is not permitted unless fitted in production before 1st January 1994.

Turbocharged cars running in class A are shown in 6.4 with the agreed turbocharger specification. Cars not shown will require to be approved by the organisers. Application must be made, stating the turbocharger and specification. This will be considered and will be subject to approval which may require the fitting of a restrictor.

All cars in Class A using a turbocharger or supercharger with a restrictor must have the restrictor fixed to the compressor housing. All the air necessary for feeding the engine must pass through this restrictor which must respect the following:

The maximum internal diameter of the restrictor is as shown in 6.4, maintained for a minimum distance of 3 mm measured downstream of a plane perpendicular to the rotational axis situated at a maximum of 50 mm upstream of a plane passing through the most upstream extremities of the wheel blades.

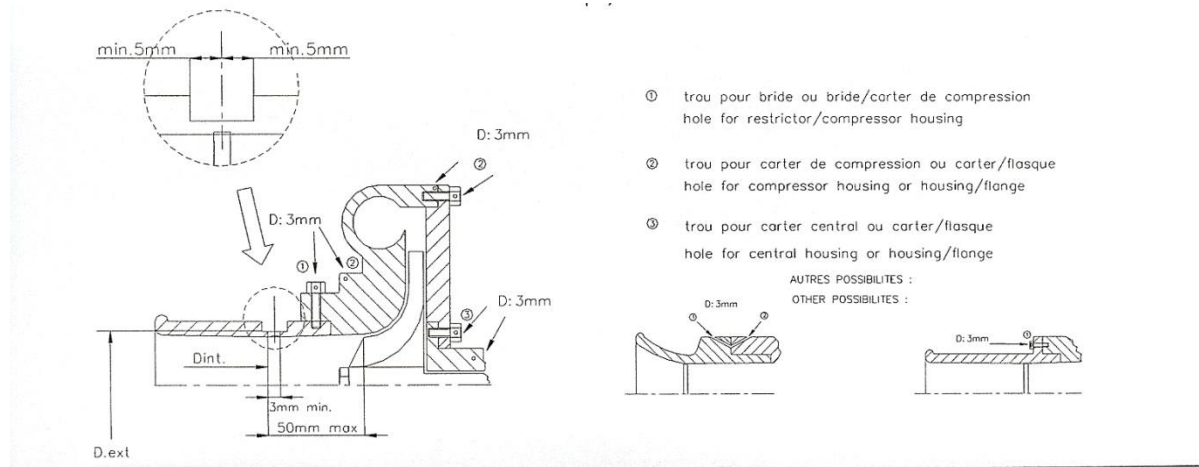
This diameter must be complied with, regardless of the temperature conditions. The external diameter of the restrictor at its narrowest point must be less than 39 mm, and must be maintained over a distance of 5 mm to each side.

The mounting of the restrictor onto the turbocharger must be carried out in such a way that two screws have to be entirely removed from the body of the compressor, or from the restrictor, in order to detach the restrictor from the compressor. Attachment by means of a needle screw is not authorised.

For the installation of this restrictor, it is permitted to remove material from the compressor housing, and to add it, for the sole purpose of attaching the restrictor onto the compressor housing.

The heads of the screws must be pierced so that they can be sealed.

The restrictor must be made from a single material and may be pierced solely for the purpose of mounting and sealing, which must be carried out between the mounting screws, between the restrictor (or the restrictor/compressor housing attachment), the compressor housing (or the housing/flange attachment) and the turbine housing (or the housing/flange attachment) (see Drawing below).



Turbocharged cars running in classes B, C, D and E must use the standard production turbocharger/supercharger. The only modification permitted to these turbochargers is the fitting of a 360 degree thrust bearing to improve reliability.

In all classes, hybrid turbochargers are not permitted. Intercoolers may only be fitted if used in production and must be the standard production item or one with a volume no greater than the Ford Sapphire Sierra 4x4 intercooler part number V90BB 9L440. The use of water injection is permitted to improve reliability.

The organisers reserve the right to make immediate changes such as adding or resizing intake restrictors and/or intercoolers for all forced induction engines.

### 5.2.3.1 BMW E36 Specific regulations

In order to keep performance at the front of the field in check, The E36 3.0 litre M3 must run an S50B30 engine. All internal components must be as originally supplied by the manufacturer including crankshaft, pistons, connecting rods and standard production camshafts - part numbers Inlet 11311402193 Exhaust 11311317680

Manufacturer over sizing of piston and bore (86,165mm +0.20) is permitted.

The Cylinder head must be completely standard, though may be skimmed within manufacturer's tolerances, a standard OEM head gasket must be used.

Injectors must be standard PART NUMBER BMW -13641310641 BOSCH- 0280150701

Standard OEM throttle bodies and exhaust manifolds must be used.

The engine must remain in the standard production position

For reliability a Group N oil restrictor may be used in the cylinder head and *ONLY* the following E36 Evo parts:-

Aluminium Doors on the Coupe model, Sump, Gearbox, and 210mm differential. An E46 M3 Oil pump may be fitted. The EGR pump may be removed.

For the avoidance of doubt,

The Flywheel may be replaced but must be a single piece and constructed from steel

The Radiator must be of original size and shape and must be mounted in the original position..

Additional bonnet vents are prohibited.

Bumpers must be oem pattern and may not be modified

No additional openings are permitted in the bumper/airdam

The front nearside fog light aperture may be used for an air intake feed. It may not be modified in any way

The original M3 front bumper lip may be used; no additional front splitter may be added.  
Only the original M3 rear spoiler may be used.  
Front wishbones must be a standard production e36 unit.  
Roll bars must be of standard mounting and operation but diameters are free.  
Drop Links may be adjustable.  
Rear camber arms must be standard E36 production, but may be reinforced.

### End of BMW E36 Specific regulations

Cars with a number of fuel injectors in excess of the number of cylinders are not eligible for this series.  
The E36 M3 EVO, Nissan Skyline GTR and Escort Cosworth or components homologated for these vehicles are not eligible for this series.

- 5.2.4 Cars must be presented to a high standard. Unpainted panels, unrepaired damage or cars not achieving a satisfactory level of preparation and presentation, as judged by the series scrutineer, may receive a warning and may ultimately result in exclusion.
- 5.2.5 Presentation for a vehicle for scrutineering is a declaration by the entrant that the vehicle is eligible for that event and fully complies with the series regulations.

### 5.3 Safety Requirements:

All vehicles regardless of engine capacity must be fitted with a full rollcage to a minimum of MSA Yearbook drawings No. 4, No. 5 or No. 6. Additionally, safety doorbars are mandatory.  
All vehicles must comply with the minimum prevailing MSA safety requirements in the following Articles of MSA Appendix Safety Criteria Regulations Section K: Vehicle Categories Covered, K 2.1, K 3.2.2 a), K 6, K 8, K 9 & K 13.

- 5.3.1 **Safety Harnesses:** In order to maintain the integrity of the harness system in the event of an accident, it is recommended that these should be a minimum of five-point attachment, in accordance with Q19.14.2

The use of an approved HANS device is highly recommended. To ensure correct seat belt mounting and fitment when using a HANS device, please refer to the document published by the FIA Institute for Motor Sport Safety entitled "Guide for the use of HANS in international motor sport"

#### 5.3.2 Seats

It is strongly recommended that seats have side wings or side head restraints to take account of lateral forces.

### 5.4 General Technical Requirements & Exceptions:

All vehicles must comply with the relevant sections of the MSA Yearbook Section J, Q (Tech Regs), up to and including Q 19.16.

#### 5.4 Miscellaneous:

- 5.4.1 Vehicles may be brought up to any series production, or Group N homologated specifications for that model prior to 1st January 1994.
- 5.4.2 Competitors registering in this Series do so in the full knowledge that the organisers reserve the right to require the Series Scrutineer to carry out, record and enforce eligibility checks which may include the sealing of component(s) for subsequent checking. The costs of such checking shall be borne by the series organisers but the organisers shall not be liable for the costs of stripping or reassembly or rebuilding of vehicles after the checks have been carried out.

- 5.4.3 Where these regulations call for original components or pattern parts these must be to the manufacturer's original specifications for that model as catalogued by the manufacturer or importer prior to 1st January 1994.
- 5.4.4 Advertising on vehicles is subject to requirements set out in MSA Yearbook (Q19.14.2 and H 28 & H 29 in particular).
- 5.4.5 All vehicles must comply with MSA General Technical Regulations and the relevant parts of the MSA Yearbook except where specified below.
- 5.4.6 Any component listed on the MSA or FIA (or national equivalent for foreign cars) homologation papers for use in Group 'N' during the series production of that model may be substituted for the original production component, save that no component may be substituted which serves to alter the shape or size of the bodyshell and/or panels themselves or increases the capacity of the engine beyond that which was in production or homologated prior to 1st January 1994. Optional equipment is to be submitted to the series organisers for possible inclusion on a vehicle by vehicle basis. The responsibility to prove eligibility is that of the entrant at all times as set out in 5.2.1.
- 5.4.7 Nuts, bolts, washers and locking devices are free.
- 5.4.8 Vehicles must be fitted with an interior and at least two externally mounted rear view mirrors.
- 5.4.9 Engines may be sealed at any time by a Licensed Eligibility Scrutineer and only by written permission in advance from the series organisers or series Eligibility Scrutineer may seals be broken.

## 5.5 Chassis:

- 5.5.1 Chassis and chassis members must remain as originally manufactured and lightening or reducing of chassis or chassis member strength is prohibited save that the spare wheel well may be removed for the sole purpose of the fitting of a fuel tank in the boot area. A steel plate of at least the thickness of the metal removed must cover any remaining aperture.
- 5.5.2 Addition of material to strengthen the chassis and seam welding is permitted.
- 5.5.3 Minimum ground clearance is 40mm.
- 5.5.4 Steering wheels and steering columns are free.
- 5.5.5 Foot controls and their linkages are free but must comply with MSA Yearbook regulations.

## 5.6 Bodywork:

- 5.6.1 Bodywork must be complete and standard in shape and silhouette, material and thickness on all exterior surfaces except that bonnets, boots and spoilers may be replaced with lightweight replicas and any non metallic panel may be replaced with a fibreglass or carbon fibre replica. In the case of a hatchback the hatch may be carbon fibre or fibreglass, but the glass must be retained. The original steel bonnet, bootlid or hatch may be modified to reduce weight providing that the visible exterior surface remains as manufactured. Where original materials are unobtainable, local repairs of adequate strength may be made using modern equivalents. Replacement of panels with non-original material is otherwise prohibited. Any replacement panels must be securely fixed.
- 5.6.2 The removal of exterior decorative strips and bumper overrides is permitted. Reworking or modification to exterior bodywork is prohibited but any part of the arch/wing pressing folded into the wheel arch may be deformed, but not removed, to give clearance to the tyres. Any item below the centreline of the wheel must not project beyond a line drawn at 45 degrees to the horizontal and tangential to the bodywork (not including overrides).

- 5.6.3 All internal panels and subassemblies must remain as originally manufactured, save that interior door cards may be removed or replaced subject to meeting MSA requirements. Strengthening is permitted. Battery trays and their supports may be removed.
- 5.6.4 Interior:
- a) These regulations require the retention of the dashboard. In the habitable area, floor carpets, under felt, sound deadening, headlining, front and rear parcel shelves, centre consoles, the front passenger and rear seats and trim in the boot/luggage compartment may be removed.
  - b) Instrumentation is free.
  - c) All window winder mechanisms must be fully operational and function as production. It is permissible to change electrically operated windows to manual winding operation or vice versa. Windows must be of the same material as production.
  - d) Driver's seat is free subject to MSA requirements and the driver must be located entirely to one side of the centre line of the car.
  - e) Heaters and interior ventilation systems may be removed.
- 5.6.5 The original boot and bonnet hinges and fasteners may be removed and are free but the original bonnet and boot shut lines must be as in production.

## 5.7 Engine:

- 5.7.1 The engine must be located in the original position.
- 5.7.2 The original standard production cylinder block may be used or an alternative manufactured by the same manufacturer to the original production specification including but not limited to material, bore, number of main bearings and number of main bearing fasteners must be used and may be re-bored up to a maximum of plus 0.065".
- 5.7.3 The cylinder head(s) must be the standard production component or an alternative manufactured by the same manufacturer as the original production component to original production specification including but not limited to material, number of valves, ports and plugs, same plug angle, valve angle/port configuration and operating type and fixed directly onto the original standard production cylinder block without modification.
- 5.7.4 The crankshaft is free, but the original stroke and number of bearings must be retained.
- 5.7.5 Camshafts, camshaft bearings and drive systems are free, provided that they remain in their original positions and remain the sole means of operating the valves.
- 5.7.6 Induction.

Unless otherwise individually agreed, only the original production type of induction is permitted except that vehicles fitted with injection in production may be fitted with carburettors.

Carburettors, their linkages and inlet manifolds are free, within the limitation that the total number of chokes must not exceed the maximum number of cylinders.

Fuel Injection is only permitted if fitted in production prior to 1st January 1994. If this system is retained, the method of triggering and operation should remain as fitted in production or homologated for Appendix J Group N. The plenum chamber is free but the number of throttles must not exceed the number fitted in production or homologated before 1<sup>st</sup> January 1994. Fuel injectors must be in the original location and their number must not exceed the original number fitted in production, homologated before 1<sup>st</sup> January 1994 or the number of cylinders.

For clarity, this means that aftermarket throttle bodies are prohibited unless individually waived.

Air filter and air filter box may be removed and air ducting/trunking is free provided it does not extend beyond the periphery of the bodywork. Anti surge pipes are permitted as also are return pipes from the carburettor/injection system.

- 5.7.7 Radiators are free but must remain in their original location.
- 5.7.8 Oil coolers and additional water radiators are permitted provided they are located within the periphery of the bodywork.
- 5.7.9 The exhaust system is free subject to MSA requirements.
- 5.7.10 Dry sump systems are prohibited. Wet sumps may be increased in volume, baffled and/or gated to provide protection from oil starvation or surge.
- 5.7.11 The ignition system is free, however the firing order must not be changed.

Forced induction is not permitted unless fitted in production before 1st January 1994. Boost pressure must not be adjustable during Practice, Qualifying or Race sessions. When fitting of a turbocharger is permitted by these Regulations it shall be the model defined in 6.4 Class A; or the standard production or homologated component in the remaining classes and must not be modified save for the fitting of a 360 degree thrust bearing to improve reliability. Hybrid turbochargers are illegal. All Turbo car competitors must inform the organisers of the turbocharger specification intend to run. This will allow checking by the scrutineer. Any change of turbocharger will need prior approval from the P8RS committee.

- 5.7.12 Intercoolers may only be fitted if used in production. Turbocharged cars may run a maximum of 1.3 bar boost. Provision must be made to fit a Project 8 racing supplied MAP sensor plumbed into the plenum chamber. The MAP sensor must be fitted in such a manner as to allow easy fitment, removal and blanking off, if removed entirely. Provision of an RPM feed must be made from either the low tension side of the coil, coil pack or ECU

The organisers reserve the right to introduce or modify the size of intake restrictors, and/or intercooler requirements for forced induction engines.

- 5.7.13 Inlet and exhaust manifolds are free unless stated otherwise.
- 5.7.14 It is permissible to remove metal from original cylinder blocks and heads.
- 5.7.15 Rotary engined cars. The first generation (Series 1, 2 and 3) Mazda RX7 may only use the "12A" or "13B" designation engine as fitted in production.  
The housings, induction and exhaust ports may be modified by removal and addition of material.  
If using the 13B engine: Bosch Injection may be retained in completely standard, unmodified form, or carburettors can be adopted as per 5.7.6.  
Engine capacity will be determined by using an equivalency factor of 2:0
- 5.7.16 Fuel pumps and fuel tanks are free subject to MSA requirements.
- 5.7.17 All other engine components are free.
- 5.7.18 Engine Sealing: Wire or paint may be used. To allow for scrutineers wire seals, every installed engine must have 1/16" holes drilled in readily accessible locations:  
A - Sump: Cross drilled through two adjacent retaining screws or studs.  
B - Rocker/cam cover: Cross drilled through two adjacent retaining screws or studs.



- 5.7.19 Engines may be sealed from the car's first event. Thereafter the seals must be in place at all times. If a seal needs to be removed for any reason, the entrant must inform the series scrutineer who will then re-seal at the first opportunity.

## 5.8 Suspension:

### 5.8.1 PERMITTED MODIFICATIONS

Modification to the suspension is subject to the following conditions:

The spring and damper configuration and all of the original mounting points must be retained and used in the operation of the suspension except that coil over dampers may be used with adjustable spring platforms. The replacement of bushes by adjustable spherical bearings is only permitted on the following: The top mounts of the front dampers, the top and bottom of the rear dampers and the anti roll bars.

- 5.8.1.2 All other bushes and bearings must either be as originally supplied; replaced by spherical bearings inside the original mounting or with the rubber replaced by nylon or nylatron type material.

### 5.8.2 PROHIBITED MODIFICATIONS

The fitting of suspension or suspension components from one model to another.

Where parts are unavailable or prohibitively priced, the series organisers reserve the right to approve alternatives. Such alternatives will be listed specifically,

The fitting of spherical bearings which cause the original location of the bush to be altered. For the avoidance of doubt, this precludes the fitting of adjustable rod ends to suspension components, unless fitted in original production.

- 5.8.3 Dampers are free providing they are mounted on the original mounting points.

- 5.8.4 Anti roll bars and their mountings and shape and material are free providing they fit directly on to the original body/chassis mounting points and the mobile suspension units. No other additional suspension components are permitted.

- 5.8.5 On cars where the original anti roll bars provide wheel location, a compression strut may replace the anti roll bar and an additional anti-roll bar may be fitted.

## 5.9 Transmission:

- 5.9.1 The gearbox must remain in the original position. Vehicles must use either the original production type of gearbox or the homologated alternative.

- 5.9.2 Gear ratios and type are free but gearboxes and transaxles with rapidly interchangeable ratios are prohibited.

- 5.9.3 Only the original production or homologated (Group N) number of ratios and overdrives may be fitted.

- 5.9.4 The rear axle must remain in its original position.

- 5.9.5 The rear axle casing must be the original standard production component but may be modified and strengthened.

- 5.9.6 The final drive ratio is free.

- 5.9.7 Mechanical limited slip or torque biasing differentials are permitted.

- 5.9.8 Sequential gearboxes and/or traction control devices are prohibited.

5.9.9. Where a differential casing is removable from an axle casing the differential casing must be regarded as part of the original axle casing and is covered by the same technical regulations.

## 5.10 Electrical:

5.10.1 Electrical equipment is free provided that a generator, battery and starter are fitted and in full working order at all times.

5.10.2 Headlights, tail lights, and stop lights must be in full working order and in the original position. Removal of lights for the purposes of ducting etc is prohibited, but motors may be removed. High intensity rear light and windscreen wiper to MSA requirements must be fitted and in full working order.

## 5.11 Brakes:

5.11.1 Brake systems are free (though see 5.12.1) save that carbon or ceramic disks and ABS systems are prohibited unless fitted in production, in which case they must be to production specification. Ducting for the purpose of cooling brakes or removing dust is permitted provided it is not visible outside the car, serves no other purpose and if beneath the car, does not project beyond a line drawn at 45 degrees to the horizontal and tangential to the bodywork (not including overriders). Modification or removal of brake back plates is permitted.

5.11.2 Cars must be fitted with an operational hand brake.

5.11.3 Brake lights must be operational and operated only by the brake pedal without a delay. The high intensity rear light must not be operated by the brake pedal.

## 5.12 Wheels and Tyres:

### 5.12 Wheels:

5.12.1 Road wheels must be no greater diameter than the original production or Group N homologated diameter plus 2" to a maximum of 17", fastened to their hubs by the original number of studs/bolts. Centre locking wheels and their hubs are prohibited. Material is free.

However, a wheel of production diameter must be able to be fitted to the hub and rotated, as and when required. This effectively precludes the fitting of brake systems which are a larger diameter than the original wheel diameter will allow. Any variance from this will require an individually agreed waiver. Competitors must supply an original diameter cast, non split rim wheel at each meeting for the purposes of verification.

Maximum permitted rim widths are:

Class A 9.0"

Class B 9.0"

Class C 8.0"

Class D 7.0"

Class E 7.0"

### 5.12.2 Tyres

The control tyre for the series is the Toyo Proxes R888 (GG Compound).

Toyo List 1A Tyres are also eligible for cars running to their own series regulations.

No modification to tread pattern or depth is permitted.

## 5.15 Weights:

Minimum weights

For cars in Classes A, B and C – 95% of the published kerb weight or 1400 Kg, whichever is lower.

For cars in Classes D and E – 90% of the published kerb weight.

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This includes the driver, normally seated with racing overalls and helmet only.

Invited Cars using Toyo tyres and fully compliant with their series regulations – at the weight determined in their specific championship or series. But see 5.2.3 for cars running Perpsex windows..

Kerb weights will be determined by the series organiser sourced reference material. The organiser's decision is final. The list of current weights will be available on the club website. If you believe that the weight for a particular vehicle is incorrect, feel free to contact the organisers.

The series organiser reserves the right to increase or decrease minimum weight for eligible cars as appropriate.

These are true minimum weights with no tolerance and all cars must comply at all times. Ballast is permitted to achieve these minimum weights but weight may only be removed within the limits of the modifications detailed within these regulations. Ballast must be securely attached within the habitacle and attachment bolts predrilled for the purpose of attaching scrutineers wire seals. The total weight of ballast carried, must be declared in the scrutineering log book and be in position at all times during practice and racing. All cars must comply with these weight limits irrespective of the year of manufacture and any other series regulations or waivers.

To assist with and speed scrutineering checks, the permitted minimum weight in kilograms must be clearly displayed in the lower corner of both rear side windows or C pillars in digits not less than 30mm high.

## 5.17 Numbers and Series Decals:

### 5.17.1 Race Numbers must comply with MSA Regulation Q11.4:

The numbers for each rear side window shall be;

- (i) a minimum of 200mm high
- (ii) with a stroke width of at least 20mm
- (iii) coloured reflective yellow.

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

- (i) the numerals must be at least 150mm high
- (ii) be in the same colour and font as those displayed on the rear side windows
- (iii) be placed no closer than 50mm from the lower edge of the windscreen "sun-strip" and 50mm from the side edge of the windscreen.

### 5.17.2 All vehicles must display the series advertising material associated with a Series sponsor as required by the series.

### 5.17.3 Rear windows may be covered with championship or personal sponsor livery to a maximum depth of 250mm from the top of the window, measured from the centerline of the vehicle and must also comply with Q 19.2.2

- 1) Windscreen Screenstrip - will be supplied.
- 2) Rear Screen top - will be supplied
- 3) MSVR decal on each side of the car - will be supplied.
- 5) MSVR badge on drivers race suit - will be supplied
- 6) Others TBA

## 6. APPENDICES:

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

### 6.1 Race Organising Contacts:

Drivers Representative: Colin Stubbs [info@p8r.co.uk](mailto:info@p8r.co.uk)

Series Scrutineer: TBA

Please do not telephone either after 8.00 pm.

MSVR: Simon Gnana-Pragasam  
Brands Hatch Circuit  
Longfield  
Kent  
DA3 8NG  
e: [simon.gp@msv.com](mailto:simon.gp@msv.com)  
t: +44 (0)1474 875263

### 6.2 Commercial Undertakings:

None

### 6.3 Agreed Waivers:

- 6.3.2 Forced induction cars over 1800cc may use an intercooler of the same internal volume as the Sapphire Sierra 4x4 intercooler, but not one of a greater volume.
- 6.3.3 2.2 litre Lotus Sunbeam models are eligible.
- 6.3.4 The Rover 220 Turbo "Tomcat" may run with the headlamp cover, mesh grille in the front bumper and base 16" wheels as used in the original Roversport series. Picture supplied on request.
- 6.3.5 The Renault 5 GT Turbo may run a Garrett T25 turbocharger (Garrett part number 465199-0003 with frame size TB2555). The compressor housing may be swapped with an unmodified Garrett T25 turbocharger compressor housing from the Saab 900 turbo for ease of fitting. The only modification permitted to this turbocharger is the fitting of a 360 degree thrust bearing to improve reliability. This model may run with a mesh grille in the front panel and on the bonnet. The dimensions and placement of these will be available on request.
- 6.4 Class A Turbocharged cars, permitted turbocharger specifications and relevant restrictors; the latter may be subject to immediate change as required by the organisers in order to balance performance.

Turbo origin	Compressor A / R	Trim compressor	Turbine A / R	Restrictor	
Garrett T3 (TB0361)	0.42	55	0.48	36 mm	Ford Sierra Cosworth 2WD Ford Sierra Sapphire 2WD
Mitsubishi TD04HL-19t	36mm	54	TBA	TBA	Volvo 850T

## 6.5 Log Books:

A central logbook will be held by the eligibility scrutineer where specific eligibility infringements will be recorded and a copy issued to the entrant at scrutineering.