



TOYO TIRES **RACING SALOONS**



1. SPORTING REGULATIONS - GENERAL

1. SPORTING REGULATIONS - GENERAL

1.1 Title & Jurisdiction:

The 2018 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: RS2018/008

Race Status: National B

1.2 Officials:

1.2.1 Co-ordinator:

Julian Newman

1.2.2 Series Eligibility Scrutineer:

Nigel Hoyle

1.2.3 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: Barry Morris or his appointed deputy

1.3 Competitor Eligibility:

1.3.1 Entrants must:

- (a) be fully paid up valid membership card holding members of the Project 8 Racing Club & MSVR and
- (b) be Registered for the Championship and
- (c) be in possession of a valid MSA Entrants Licences.

1.3.2 Drivers and Entrant/Drivers must:

- a. Be current Members of the Project 8 Racing Club and MSVR and
- b. be Registered for the Championship and
- c. be in possession of valid Competition (Racing) National B Status Licence, *as a minimum* or
- d. be 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)

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

1.3.4 Membership of MSVR is free on entry into any race for the series.

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 £150 - Made payable to:- Project 8 Racing Club

1.4.3 Registrations will be accepted from 1st February 2018 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. SPORTING REGULATIONS - GENERAL

1.5 Series Events:

The 2018 **TOYO TIRES RACING SALOONS** will be held over 14 Races at the following seven race meetings:

Date	Circuit	Organising Club	Races
14/15 April 2018	Donington Park National	MotorSport Vision Racing	2
19/20 May 2018	Brands Hatch GP	MotorSport Vision Racing	2
17 June 2018	Brands Hatch Indy	MotorSport Vision Racing	2
21 July 2018	Cadwell Park Full	MotorSport Vision Racing	2
11/12 August 2018	Snetterton 300	MotorSport Vision Racing	2
8/9 September 2018	Donington Park GP	MotorSport Vision Racing	2
29/30 September 2018	Rockingham ISSC	MotorSport Vision Racing	2

1.6 **Scoring:** TTRS is a series of standalone races with no accumulation of points.

1.7 AWARDS

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

1.7.2 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.

1.7.3 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 - SERIES RACE MEETINGS & RACE PROCEDURES

2.1 Entries:

2.1.1 Competitors are responsible for sending in correct and complete entries with the correct entry fees prior to the entry closing dates which shall be three days before each round.

- 2.1.2 Incorrect or incomplete entries (Including Driver to be Nominated Entries) are to be held in abeyance until they are complete and correct and the date of receipt for acceptance of entry purposes shall be the date on which the Secretary of the Meeting receives the missing or corrected information or fee.
- 2.1.3 Any withdrawal of Entry or Driver/Car changes made after acceptance of any entry must be notified to the Secretary of the Meeting in writing. 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.
- 2.1.4 Blank
- 2.1.5 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.
- 2.1.6 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.

2.2 Briefings:

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

2.3 Qualifying Practice:

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

2.4 Races:

Should any 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)

2.5 Starts:

- 2.5.1 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.
- 2.5.2 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.

- 2.5.3 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.
- 2.5.4 Any drivers unable to start are required to indicate their situation as per MSA Regulation Q12.13.2.
- 2.5.5 In the event of any starting lights failure the Starter will revert to use of the National Flag.
- 2.6 Session Red Flag**

Should the need arise to stop any race or practice, RED LIGHTS will be switched on at the Startline and RED FLAGS will be displayed at the Startline and at all Marshals Signalling Points around the Circuit.

This is the signal for all drivers to cease circulating at racing speeds, to slow to a safe and reasonable pace and to return to the pit lane, during practice, and to the starting grid area, during a race, unless otherwise directed by officials.

Cars may not enter the Pits unless directed to do so. Work on cars already in the pits must cease when a race is stopped.

2.7 Pits, Paddock & Pitlane Safety:

- 2.7.1. Pits & Paddock: Competitors must ensure that the MSA, Circuit Management and Organising Club Safety Regulations are complied with at all times.
- 2.7.2. Pitlane: The outer lane or lanes are to be kept unobstructed to allow safe passage of cars at all times. The onus shall be on all Drivers to take all due care and respect the pit lane speed limits.
- 2.7.3. Refuelling: May only be carried out in accordance with the MSA General Regulations, the Organising Club Regulations, Circuit Management Regulations and the SRs or Final Instructions issued for each Circuit/Meeting.
- 2.7.4 Speed Limit: Pit Lane Speed Limit will be 60 km/h unless otherwise notified.

2.8 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.

2.9 Results:

All Practice Timesheets, Grids, Race Results are to be deemed PROVISIONAL until all vehicles are released by Scrutineers after Post Practice/Race Scrutineering and/or after completion of any Judicial or Technical Procedures. (MSA Regulation D26.3)

2.10 Timing Modules

- 2.10.1 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.
- 2.10.2 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.
- 2.11 **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.

2.12 Operation of Safety Car

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

2.13 ONBOARD CAMERAS MSA Regulation J5.21 refers. See also Art. 5.18 of these regulations

3 SPECIFIC SERIES REGULATIONS

4. SPECIFIC SERIES 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 2018 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 2018 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 **approved** two wheel drive, four seater saloon and sports racing cars 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. ***Cars not homologated in Group N or meeting the above criteria may be eligible subject to the 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. The current registered vehicles list is available from the series organisers on request, but is not intended as an exhaustive list of eligible cars.

To enable more drivers wishing to race with cars of similar performance to join the series and which do 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 a combination of, but are not limited to, a change of class, reduction of turbo boost limit, additional weight.

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 Eligibility 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 initially based on production capacity:

- Class A Over 2989cc
- Class B 2501cc to 2989cc, Cars running to JEC regulations classes E&G,
- Class C 2001cc to 2500cc
- Class D 1601cc to 2000cc
- Class E Up to 1600cc
- Class F cars fully compliant with the Production BMW Series regulations
- Class G Cars conforming to PBMW NG regulations

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

- 1800cc and under 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 1.8
- 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 engined cars 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.

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.

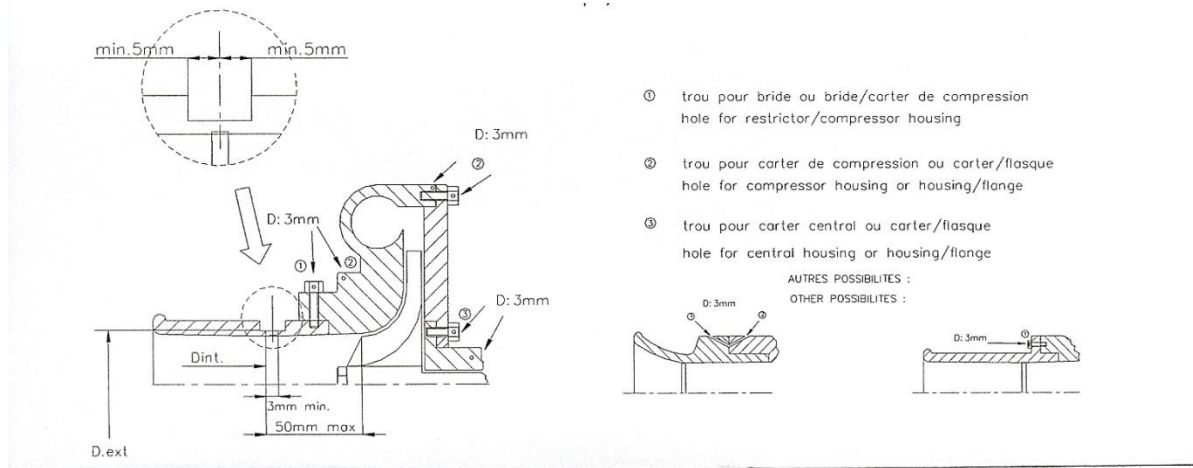
This diameter must be complied with, regardless of the temperature conditions. The external diameter of the restrictor at its narrowest point must be less than 39 mm, and must be maintained over a distance of 5 mm to each side.

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

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 mm +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 E36 3.2 litre (Evo) must run an S50B32 engine.

All internal components must be as originally supplied by the manufacturer including crankshaft, pistons, connecting rods and standard production camshafts - part numbers Inlet 11311404803 Exhaust 11311405577.

Manufacturer over sizing of piston and bore (86 mm +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 - 13641405044 BOSCH- 0280150792

If using the Evo 3.2 engine, the Standard OEM Inlet plenum 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 except for holes drilled in the area which would be covered by the UK registration plate. If used, they must be covered by mesh and painted to match the surrounding bodywork. The organiser reserves the right to withdraw this permission during the season.

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; an additional flat plane front splitter may be added but must not extend forward more than 80mm from the original bodywork and rearward beyond the leading edge of the front wheels. The splitter must not extend laterally.

Only the original M3 or GT2 copies, matching the oem part (numbers 51712264 and 51712267 and associated risers) rear spoilers 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 and the Drop Links may be adjustable.

Rear lower wishbone Part Number 33326770813 must be standard E36 production, but may be reinforced.

End of BMW E36 Specific regulations

BMW E46 Specific regulations

Minimum weight for this model will be 1450 kg

In order to keep performance at the front of the field in check, The E46 3.2 litre M3 must run an **S54B32** engine. All internal components must be as originally supplied by the manufacturer including crankshaft, pistons, connecting rods and standard production camshafts - part numbers Inlet 11317832194 or [11317833223](#) Exhaust [11317833223](#) or [11317833225](#) Manufacturer over sizing of piston and bore (87mm +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 OEM Part Numbers BMW-13647830975 BOSCH-

Standard OEM Inlet plenum, 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

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; an additional flat plane front splitter may be added but must not extend forward more than 80mm from the original bodywork and rearward beyond the leading edge of the front wheels. The splitter must not extend laterally.

Only the original M3 rear spoiler may be used.

Front wishbones must be a standard production E46 unit.

Roll bars must be of standard mounting and operation but diameters are free and the Drop Links may be adjustable.

Rear lower wishbone Part Number 33326770813 must be standard E46 production, but may be reinforced.

End of BMW E46 Specific regulations

Cars with a number of fuel injectors in excess of the number of cylinders are not eligible for this series. The E36 GT, BMW E46 CSL, Nissan Skyline GTR, Sierra RS500 Cosworth 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 Eligibility 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 FHR device is mandatory. 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 Eligibility 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 a wide angle 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 habitacle, 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 1st January 1994. Fuel injectors must be in the original location and their number must not exceed the original number fitted in production, homologated before 1st 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 they intend to run. This will allow checking by the Series Eligibility 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 or 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 1.8

- 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 Eligibility 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. For the avoidance of doubt, BMW E36 and BMW E46 lower wishbones and rear lower camber arms must remain OEM parts, but they may be reinforced.

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.

5.9 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 are prohibited. Any form of electronically assisted launch or traction control is prohibited. If available in production, they must be disabled.

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 18", 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 R888R (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,
Exceptions - The BMW E36 3.0 - 1300kg, the E36 3.2 -1375 kg and the E46 M3 -1425 kg.

E34 M5 using OEM camshafts as fitted to the original model 1300kg in Class A or 1400kg in Class B.

If using alternative camshafts Class A Only and 1400kg.
For cars in Classes D and E – 90% of the published kerb weight.
This includes the driver, normally seated with racing overalls and helmet only.

Invited Cars using List 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 Perspex 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 Only competition numbers as allocated by the series Registrar shall be displayed in accordance with MSA regulation Section J Drawing no 4 and shall remain as allocated until the end of the season in question.
- 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 if available
 - 6) Others TBA

5.18 ONBOARD CAMERAS

- 5.18.1 All competitors will be required to carry an on board in car camera for the primary purpose of safety. 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 or the Project 8 Racing Club Committee.
- 5.18.2 Competitors must provide and fit an in-car video recording camera, capable of providing event video images. The camera must be positioned to ensure that the driver, an internal brake light and a clear external view forward are within the recorded images. The images must be stored in MP4 - a common video data format that does not require specialist software in order to be viewed.
- 5.18.3 MSA Regulation J5.21 refers

6. APPENDICES:

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

6.1 Race Organising Contacts:

Drivers Representative: Kieron Lehane info@p8r.co.uk

Series Eligibility Scrutineer: Nigel Hoyle

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
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	TBA	54	TBA	TBA	Volvo 850T