

The following Technical Regulations are set out in accordance with the MSA specified format and it should be clearly understood that if the following texts do not clearly specify that you can do it you should work on the principal that you cannot.

## 5.2 General Description:

All 2010 MSA GENERAL REGULATIONS & Section Q (Technical Regulations) & Section K apply as per the 2010 MSA Year Book. The general principle for eligibility shall be that the cars are modified versions of front engined series Production Saloon and Hatchback car models, including any original manufacturer produced or approved options for the year and models which were/are available from recognised dealer networks for the manufacturer, year and model and recognised variant.

The onus concerning eligibility and provision of original manufacturer documented proof of eligibility shall rest with competitors at all times, and competitors are advised to check with the series Eligibility Scrutineer if they have any doubts or queries concerning the eligibility of their cars.

## 5.3 Safety:

All MSA Appendix Section K Safety Criteria Regulations apply as relevant

## 5.4 General Technical Requirements & Exceptions:

The series is to cater for STEEL BODIED Saloon and hatchback cars which have been derived from cars homologated in FIA Appendix 'J' Group A (N) or Appendix 'J' 1981 Group 1, or from any Car which the MSA has verified as having been produced in minimum homologation quantities, and detailed on an MSA National Homologation form (Production Car Specification Sheet).

T1	Over 3000cc multivalve Over 4000cc dualvalve Over 2101cc forced induction
T2	2001-3200cc multi valve Upto-2100cc forced induction 3000-4000cc Dual valve
T3	Upto 2000cc multivalve Upto 3000cc dual valve
T4	Upto 2000cc dual valve Upto 1600cc multivalve
T5	Upto 1300cc multivalve Upto 1600cc dual valve
TB	AIR COOLED VW BEETLES only accepted on individual application
TG	Guest class for cars not complying with the technical regulations, cars admitted at organisers discretion only

EXTERNAL IDENTIFICATION OF THE MODEL. All cars must be externally recognisable as the model as entered. Manufacturers' decals/badges can be removed but if they are retained they must relate to the model as entered, in particular badges relating to engine capacity.

Any vehicle fitted with a motorcycle engine, or derivative, shall be deemed ineligible for any class.

Cars that meet the spirit of the regulations but not the technical regulations may be admitted at the discretion of BARC SEC

## 5.5 Chassis:

The standard floor pan, sills, door surrounds, bulkheads and roof must remain exactly as produced by the manufacturer in construction, dimension and material.

It is prohibited to cut any holes or remove any fixed panels from the standard floor pan, front or rear inner or

outer wheel arches, front or rear bulkheads (engine to habitacle and habitacle to boot) for the purpose of mounting or giving clearance to suspension components. Inner wheel arches may only be modified to allow the attachment of shock absorber mountings.

It is only permitted to make holes for the passage of cables, fuel, water, oil, hydraulic, instrument or fire extinguisher line. All redundant holes must be covered with metal plates. Nothing must interfere with, conceal, or negate 5.3.2. Random inspection by the eligibility scrutineer and series co-ordinator to all entries will be undertaken to prevent excessive weight removal jeopardising potential safety of the chassis, shell and bodywork.

Reinforcing of the chassis is allowed in all classes.

Bulkheads and inner wings may only be modified to permit the clearance of the induction system. This shall be understood to include air induction ducting, manifolding, and trumpets, ram pipes for engine carburation or fuel injection system only. A maximum clearance dimension of 75mm will be allowed.

#### CHASSIS MODIFICATIONS PERMITTED.

The removal of under body sealants. Minimal modifications to floor pan to allow the fitting of an exhaust silencer to MSA requirements or a fuel tank or safety cell.

Space framed cars are prohibited

### 5.6. Bodywork:

With the exception of the following, no modifications are allowed to external or internal body panels, chassis, or unitary construction:

Replacement of the front and rear wings and front body panels by lightweight material panels is permitted providing they exactly retain the standard silhouette in side elevation. Boot lid and door panels may be replaced by lightweight material providing they exactly retain the original standard shape and outline. Bonnet side profile may be modified to a maximum of 120mm

NOTE: front is defined as a point forward of the baseline of the windscreen. Rear wing is defined as being in the area below the baseline of the windows and rearward of the line of the rear most side door opening.

The removal of all exterior chrome/decorative parts is allowed with the exception of the complete radiator grill and headlamp trim.

The original headlights must be fitted and operational for all cars. Brake/stop lights must be operational on all cars. The stoplights must only work as a result of applying the brakes and the fitting of any type of other switching device is prohibited.

Standard wings, if retained, may be modified by working the original metal and/or fitting wing extensions which must be over the tyre in accordance with vehicle regulations.

It is permissible to cut holes in the rear wing extensions of 150sq.cm maximum to accommodate oil coolers. The holes must be parallel and vertical. Wheels and tyres must not be visible through the apertures.

Plastic is permitted for side or rear windows. Windscreens must be either laminated or of plastic minimum 4mm thick.

Spoilers and air dams are permitted below the level of the road wheel centres providing they do not protrude beyond the original coachwork in plan view, including bumper, grill etc.

A single element rear spoiler may be fitted; it must not exceed 50% of the height of the rear window and may not exceed the width of the car.

Competitors may modify the front inner wings forward of the front bulkhead for purposes of additional cooling to brakes and engine, provided any front sub frame fitted is fitted with substantial additional bracing to ensure it is located in a rigid and structurally sound manner, acceptable to the event Scrutineers. In the case of any doubt as to the legality of any such modification, reference shall be made to the current single make racing technical regulations for that type of car. The Scrutineers decision is final and all competitors entering vehicles with modified front inner wings are advised to produce a set of such regulations at scrutineering if required.

Interior.

(a) The driver's seat is unrestricted but should incorporate a head restraint.

(b) It is permitted to remove the floor carpets, underfelt, sound insulation, head lining, the rear seats, and the front passenger seats.

(c) It is permitted to carry out modifications on the window winders, instrument panel and all the driving controls.

(d) The driver must sit on the same side as in the original car and be located completely to one side of the centre line of the car.

Ground clearance.

The car may be lowered to give a minimum ground clearance as defined by MSA i.e. 40 mm.

Wheelbase.

The wheelbase must remain as per original car within a tolerance of 5cm.

## **5.7 Engine:**

For the purpose of these regulations a dual valve engine is one fitted with a maximum of one inlet and exhaust valve per cylinder, a multivalve engine is any engine fitted with more than one inlet or exhaust valve per cylinder

Only mass production engines, cylinder heads or cylinder blocks as cast by a mass production vehicle manufacturer may be used

If the engine cylinder block or head is replaced with a non original unit for the car; this will incur a penalty of the car being classified as being entered in the next class up, in the case of a car originally in class T1 it shall be moved to the TG guest class.

To qualify as an original cylinder block for the car it must comply with MSA blue book technical regulations applying to MODIFIED PRODUCTION CARS, which states,

“The engine block must be externally identifiable as that fitted to the original model or specified option”

Forced induction is allowed only on makes and models of car where it was originally a manufacturers supplied and fitted option

Forced induction engined cars can replace the forced induction components with conventional induction systems and run in the Class that the revised engine configuration would place them in provided that the model in this revised configuration is listed.

Restrictions on forced induction cars, only 1 fuel injector per cylinder may be used (excluding cold start injector if fitted) water injection prohibited, multiple turbos prohibited, turbo anti lag systems prohibited, Water injection prohibited.

Ford Sierra Cosworths are only permitted to use Garrett T3 or T34 turbochargers

Oil coolers and additional water radiators are permitted providing they are located within the periphery of the bodywork.

Dry sump lubrication prohibited

See supplementary note referring to injectors etc above 5.1.4 & 5.1.6

Where capacity is exceeded beyond the nominal rebore tolerance for a particular car in a specific class, the car will be re-classed accordingly moving up the class scale.

Any vehicle fitted with a rotary or motorcycle engine, or derivative, shall be deemed ineligible for any class.

## **5.8 Suspension:**

Unrestricted but standard pick-up points must be retained although not necessarily used. Additions or modifications of springs, shock absorbers, and suspension heights are permitted. The fitting of adjustable suspension components and Watts linkage is permitted. Rear sub-frames, used for suspension and brake components only, may be removed.

For live axle RWD cars is permissible to adapt the floor pan to accommodate additional axle location link, but

the standard pick up points must be retained.

Suspension must retain original manufacturers type and layout

### **5.9 Brakes:**

Unrestricted, except ABS prohibited unless fitted to a car currently mot'd and taxed for use on the public highway

### **Wheels & Tyres:**

Only permissible tyre are those listed as list 1A or 1B in the MSA 2009 and 2010 Blue Books, tyres must be an EXACT match for those listed in the blue book and carry all applicable name/type numbers/designations, any tyre marked as being "not for road use" or "competition" or "race" use only shall be ineligible. Any tyre which appears to of had sidewall markings deliberately removed shall be ineligible

The wheel/tyre combination must fit within the confines of the allowable wheel arch/bodywork modifications outlined in Para's 5.3

TYRE SPECIFICATIONS: Maximum size must be within tyre manufacturers' recommended specifications to suit the wheel rim width.

Centerlock single wheel nut type wheels prohibited

### **5.11 Transmission:**

Any form of traction control apart from limited slip or lock differentials prohibited unless fitted to a car currently mot'd and taxed for use on the public highway

Sequential gearboxes and 4 Wheel drive are prohibited, otherwise Differential and gearbox are unrestricted providing that they remain in the original location within 5cm. transaxles are prohibited unless fitted to the original homologated model.

"for the purposes of the series, any gearbox which is operated other than by a conventional gear lever working in a normal "H" pattern will be classified as a sequential gearbox"

Gearbox main casing must be original to either the body shell or engine fitted to the car

### **5.12 Exhaust Systems:**

Exhaust systems are free provided MSA maximum decibel requirements are not exceeded.

### **5.13 Ignition Systems:**

Free

### **5.14 Fuel Delivery Systems:**

All fuel pumps and filters are free.

### **5.15 Fuel Tank and Fuel:**

FUEL TANK: Any type of fuel tank or safety cell may be fitted provided it conforms to MSA safety requirements.

LOCATIONS: Tank can be relocated in the boot area of the car with reasonable modifications to the boot floor to accept it. This does not mean removal of entire boot floors

FUEL: All fuels listed in MSA competitors' yearbook 2010 under The Terminology as pump fuel.

### **5.16 Steering:**

Steering systems are free in all classes.

### **5.17 Silencing:**

As per MSA Regulation

### **5.18 Weights:**

There is no minimum weight limit.

### **5.19 Miscellaneous:**

A Car Specification Sheet must be with the car when presented for scrutineering. If a manual or sheet

specifically for the model was not available then a manual for the standard version of the vehicle with any other relevant supplementary information to prove the authenticity of the updated model would be acceptable. The onus is on the entrant to prove eligibility of the model.

PROVISIONAL