

2012 THERMEX CLASSIC SALOON & HISTORIC TOURING CAR CHAMPIONSHIP

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 it, you should adopt the principle that you cannot.

5.2 Description:

5.2.1 Classic Saloon and Historic Touring Cars are four-seater saloon cars marketed before 1st January 1966.

Eligible cars are those complying with these regulations or any vehicle complying with the FIA Appendix K regulations for the current year and eligible for participation in the FIA Historic Touring Car Championship. The acceptance of a particular vehicle as being of saloon configuration and eligibility is subject to the approval of the CTCRC Committee on an annual basis.

The responsibility to prove eligibility is that of the entrant at all times. For clarification of an entrant refer to the MSA Competitors' and Officials' Yearbook. All entrants must produce a Historic Technical Passport (HTP) or Homologation papers stamped by the ASN (where issued) for that vehicle and these must be available for inspection at scrutineering. Where no such paperwork is available, the entrant must produce written confirmation from the CTCRC Committee as to the eligibility of the vehicle model in question. The CTCRC Committee in conjunction with a Licensed 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 specification.

5.2.3 Cars will run in seven classes based on the actual engine capacity, excluding the permitted overbore

Class A	Over 2,700cc
Class B	1,901 – 2,700cc
Class C	1,276 – 1,900cc and Mini over 1270cc and 970S/1071S
Class D	1001cc – 1,275cc
Class E	0 to 1000cc
Class F	Lotus Cortina (see notes 5.7.6 and 5.2.1)
Class G	Invitation Class

5.2.3.1 Invitation Class – The invitation class is designed to allow cars that, whilst not strictly adhering to the regulations, have been prepared sympathetically to the spirit of the championship and with committee approval may race under observation.

Entrants wishing to run in the invitation class must submit a written specification of the car detailing all areas where the car does not comply with these regulations.

This specification will be made available to the eligibility scrutineers for post event checks. Cars will be approved each season on an individual vehicle basis by the CTCRC Committee and the car must not deviate from the submitted specification unless such changes are approved by the CTCRC committee. Any approval may be withdrawn at any time by the CTCRC committee. Invitation class cars are not eligible for overall championship awards .

5.2.4 Cars must be presented to a high standard.

5.2.5 Presentation of a vehicle for scrutineering is a declaration by the entrant that the vehicle is eligible for that event.

5.3 Safety Requirements:

All vehicles must be fitted with a safety roll-over structure as defined in the MSA Competitors' and Officials' Yearbook - Section K.

Interior fittings, trim and bodywork may be locally modified to allow fitting of the safety roll-over structure rollage and any doorbars.

5.4 Miscellaneous:

- 5.4.1 Vehicles may be brought up to any series production specification for that model prior to 1st January 1966. For the avoidance of doubt, 'model' shall mean a vehicle of the same bodyshell shape, size, specification and silhouette.
- 5.4.2 Competitors registering do so in the full knowledge that CTCRC reserves the right to require the 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 CTCRC but the CTCRC shall not be liable for the costs of stripping or reassembly 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 1966.
- 5.4.4 Advertising on vehicles is subject to the requirements set out in MSA Yearbook.
- 5.4.5 All vehicles must comply with MSA General Technical Regulations and the relevant parts of sections C(b) & G of the MSA Yearbook except where specified below
- 5.4.6 Any component listed on the MSA, FIA/FISA (or National equivalent for foreign cars) homologation papers for use in Group One during the series production of that model may be substituted for the original component provided that the substitute part was in production or homologated prior to 1st January 1966.

No component may be substituted which serves to alter the shape or size of the bodyshell and/or panels themselves or increase the capacity of the engine unless specifically allowed by these regulations. Optional equipment is to be submitted to the CTCRC for possible inclusion on a vehicle by vehicle basis.

The responsibility to prove eligibility is that of the entrant at all times

- 5.4.7 Nuts, bolts, washers and locking devices are free.
- 5.4.8 The original mirrors may be removed but vehicles must be fitted with at least one externally mounted rear view mirror in accordance with MSA Competitors' and Officials' Yearbook, and at least one interior mirror. The fitment of a wide angle interior rear view mirror is recommended.
- 5.4.9 Engines may be sealed at any time by a Licensed Eligibility Scrutineer and only by written permission in advance from the CTCRC Committee or a Licensed 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 strength is prohibited.
- 5.5.2 Addition of material to strengthen the chassis and seam welding is permitted.
- 5.5.3 Minimum ground clearance without driver is 4" (100mm) excluding exhausts and silencers.
- 5.5.4 Steering wheels and steering columns are free.
- 5.5.5 Foot controls and their linkages are free except that the foot operated surface of the brake pedal must be located no more than 4" (100mm) forward or rearward of the original production specification position.

5.6 Bodywork:

- 5.6.1 Bodywork must be complete and standard in shape and silhouette, material and thickness on all exterior surfaces including all light lenses. Where original materials are unobtainable, local repairs of adequate strength may be made using modern equivalents but replacement of panels with non-original material is prohibited. External trim must be retained except that bumpers may be removed provided that in the event of their removal all supporting

devices and brackets as would otherwise protrude beyond the bodywork are also removed. 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 overriders).

- Jaguar Mk 1 & 2 may use accurate replica louvered bonnets as per original "John Coombs" cars

5.6.2 All Internal panels and sub-assemblies must remain as originally manufactured. Strengthening is permitted. Battery trays and their supports may be removed. It is only permitted to make holes in panels for the passage of cables, fuel, water, oil, hydraulic, instrument or fire extinguisher lines.

5.6.3 Interior:

a) These regulations require the retention of the dashboard, all interior door and rear quarter trim forward of the rearmost part of the production seating area and in original or equivalent material of the period. In the habitacle, floor carpets, under felt, sound deadening, headlining, front and rear parcel shelves, centre consoles, the front and rear passenger 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 alter electrically operated windows to manual winding operation. Material for side and rear windows is free subject to prevailing MSA requirements.

d) Driver's seat is free subject to prevailing 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.

5.6.4 The original boot and bonnet fasteners may be removed. Boot and bonnet hinges are free but the bonnet and boot shut lines must be as in production.

5.6.5 Radiator grill slats must not be removed unless they are less than 1" apart and if so alternate slats may be removed.

5.6.6 Vehicle registration marks (number plates) must be displayed front and rear.

5.7 Engine

5.7.1 The engine must be located in the original position.

5.7.2 Class A (except Ford Mustang and Ford Falcon) and Class F
The original standard production cylinder block must 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 and may be rebored up to a maximum of plus 0.065".

- Ford Mustang and Ford Falcon are only permitted to use the standard production block or a pre 1985 standard production (2 bolt mains) 302 cubic inch cast iron cylinder block or that available as part number M6010-A50 and may be rebored up to a maximum of plus 0.065".

Class B, C, D, & E

The cylinder block is free providing it is of the "same family", manufactured by the same manufacturer in the original material and approved by the CTCRC committee. "Same family" means that all removable engine components originally fitted in production to the original standard production block for that car will reassemble directly onto the replacement cylinder block except for the pistons and the crankshaft which may have a different number of main bearings and different stroke and may be rebored up to a maximum of plus 0.065".

- Ford Anglia may use a pre-crossflow production 1,498cc cylinder block.
- Cortina/Classic may use a crossflow production 1,598cc cylinder block.
- Class E - Mini and Hillman Imp only – No over-bore allowed, engine must remain original production capacity

- 5.7.3 The cylinder head is free providing it is manufactured by the same manufacturer as the original production component, of the original material, has the original number of valves, ports and plugs, same plug angle, valve angle/port configuration and operating type and fixes directly onto the original standard production cylinder block without modification.
- Ford "Kent" crossflow cylinder head is not permitted.
 - Jaguars may use a straight port head.
- 5.7.4 The crankshaft is free but in Classes A and F the original stroke and same number of bearings must be retained. For classes B, C, D and E the original production bore and stroke for the block in use must be retained excluding permitted overbore.
- 5.7.5 Camshafts, camshaft bearings and drive systems are free provided that they remain in their original positions and are the sole means of operating the valves.
- 5.7.6 In classes B, C, D & E carburation must be that used in the period or equivalent but is otherwise free. Motorcycle carburettors are only permitted in Class G subject to CTCRC Committee approval. In classes A & F the production or homologated carburation must be fitted and it may be "gas-flowed" by polishing and internal removal of metal but the intake and outlet flange dimensions must remain as original.
- Alfa Romeo Giulia Sprint GT may use twin 45DCOE Weber Carbs as fitted to the Ti Super model.
 - Ford Mustang/Falcon may use any Holley 4150 or 4160 (1.6875" Flange dimension) carburettor.
 - Jaguar Mk 1, 2 & S Type may use twin 2" SU carburettors.
 - Ford Lotus Cortina must use twin 40DCOE unless entered to Appendix K in which case must use twin 45 DCOE.
- 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 oil systems are prohibited.
- 5.7.11 The distributor may be fitted with an after-market spark-triggering device but the distributor must remain in its original position and must maintain its original function. Any additional system which processes information acquired from the ambient conditions and/or the engine is not permitted. The distributor must be the only means of determining ignition advance and retard and must continue to distribute the high-tension spark. The firing order must not be changed. The remainder of the ignition system is free.
- 5.7.12 Forced induction or fuel injection is only permitted if fitted as original equipment. Supercharged or turbocharged engines shall be subject to a capacity equivalent of 1.4:1.
- 5.7.13 Inlet and exhaust manifolds are free.
- 5.7.14 It is permissible to remove metal from cylinder blocks and heads.
- 5.7.15 Any eligible vehicle fitted with a side valve engine may employ a proprietary OHV conversion (cylinder heads, manifolds and carburettors) marketed for that engine before 1st January 1966.
- 5.7.16 Fuel pumps and fuel tanks are free subject to MSA requirements including those vehicles entered to Appendix K specification. Only pump fuel as defined by the MSA Yearbook is allowed and an MSA permitted additive is allowed.
- 5.7.17 All other engine components are free.
- 5.7.18 To allow for scrutineer's wire seals, every installed engine must have 1.6mm (1/16in) holes drilled in at least two adjacent sump bolts and two adjacent rocker/cam cover bolts.
- 5.7.19 Engines may be sealed at any time by a Licensed Eligibility Scrutineer and only by written permission in advance from the CTCRC Committee or a Licensed Eligibility Scrutineer may seals be broken.

5.8 Suspension:

- 5.8.1 Suspension type and spring type must remain unaltered (or pattern parts to the manufacturer's original specification) and in the original location but may be strengthened. Spring rate and thickness of material is free and Track Control Arms may be modified locally solely for the purpose of adjusting length. They may be strengthened. Bush material is free but spherical bearings, track rod ends or joints are prohibited unless fitted as standard and the original suspension mounting points are to be used without modification. Dampers are free but the original number must be fitted. Lever arm dampers may be changed to telescopic dampers and use new mounting points. Cars with hydroelastic suspension may run additional telescopic dampers.
- 5.8.2 Anti-roll bars, anti-tramp bars, Panhard rods, Watts linkages, lowering blocks and their mountings may be added, and these components only may incorporate spherical bearings or joints. No other additional suspension components are permitted

5.8.3 Lotus Cortina Suspension mounting measurement.

Between front strut top mounting bolts (furthest forward measured across engine bay). 1010mm +or- 5mm.
Between track control arm inner mountings across front crossmember. 437mm +or- 1.5 mm

5.9 Transmission:

- 5.9.1 Except as set out below the gearbox is free but must remain in the original position. No more than four forward ratios are permitted unless supplied as original equipment.
- 5.9.2 Gearboxes and transaxles with rapidly interchangeable ratios, or proprietary racing gearboxes, are prohibited.
- 5.9.3 An additional overdrive gearbox 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 locally modified.
- 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.
- 5.9.10 Drive shafts and propshafts are free but may only be made of metallic material.

5.10 Electrical:

- 5.10.1 Electrical equipment is free provided that generator, battery and starter are fitted and in full working order at all times.
- 5.10.2 Headlights, tail lights, stop lights and high intensity rear lights must be fitted and be in full working order.

5.11 Brakes:

- 5.11.1 Brake systems are free save that carbon disks and ABS systems are prohibited. Ducting for the purpose of cooling brakes or removing dust is permitted provided it 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 are to be fitted with an operational handbrake.
- 5.11.3 Brake lights must be operational and only operated 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:

- 5.12.1 Road wheels must be fastened by the original number of studs/bolts, split rims are prohibited and material is free. Hubs are free.
- 5.12.2 Wheels must be within 1" diameter of original equipment and all four wheels must be of the same diameter.
- 5.12.3 Tyres: The only permitted tyres are the Dunlop CR65 and no modification to tread pattern or depth is allowed.
- 5.12.4 Maximum permitted rim widths are:
- | | |
|---------|---------|
| Class A | 7.0 ins |
| Class B | 6.0 ins |
| Class C | 5.5 ins |
| Class D | 5.5 ins |
| Class E | 5.5 ins |
| Class F | 5.5 ins |

5.13 Numbers and Decals:

- 5.13.1 Only competition numbers as allocated by the CTCRC Registrar shall be displayed. All numbers are to be displayed in accordance with MSA regulation J4.1 and shall remain as allocated until the end of the season in question.
- 5.13.2 All vehicles must display the current CTCRC issued number background without modification, the BARC Shield and any other advertising material associated with a sponsor as required by the CTCRC. Failure to do so may result in exclusion from practice, race and/or results.

6. APPENDICES:

The following Commercial Regulations are “contractual” between the Entrant and / or Driver and the Organisers and / or Promoters and are not considered by MSA. Accordingly, the application of these Commercial Regulations by the Organisers and / or Promoters will not be subject to the Judicial processes of either the Championship Stewards and / or the MSA / MSC.

6.1 Race Organising Clubs and Contacts:

BARC, Thruxton Circuit, Andover, Hampshire SP11 8PN
Tel: 01264 882200 Fax: 01264 882233

Eligibility Scrutineer:
TBC (BARC)

6.2 Commercial Undertakings:

None

6.3 Agreed Waivers:

Refer to the relevant part of Section 5 for details of specific agreed waivers

6.4 Log Books:

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