

2018 CLASSIC TOURING CAR CHAMPIONSHIP

TECHNICAL REGULATIONS

**PAUL INCH - CLASSIC RACE ENGINES PRE '66
TOURING CARS**



Organised by the British Automobile Racing Club

Thruxton Circuit, Andover, Hampshire, SP11 8PN

Draft Copy

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Paul Inch - Classic Race Engines Pre '66 Touring Cars

5 TECHNICAL

5.1 Introduction:

- a. 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.
- b. Anything that is not explicitly authorised in writing by the Championship Technical Committee and anything that is not specified either in these regulations or in any Official Championship Bulletin is therefore strictly forbidden and thus will be regarded as a breach of these Technical Regulations and may be penalised as described in section 4. It should be clearly understood that technical regulations will be strictly enforced and any modification, addition, variation, tuning or removal other than specifically permitted in these regulations is prohibited.
- c. Regulations that have changed in substance from the **2017 Paul Inch - Classic Race Engines Pre '66 Touring Cars** Technical Regulations are normally indicated by being highlighted in yellow.

~~5.1.1 Technical Queries~~

~~Any matter affecting Technical Regulations must be put in writing to the Championship Eligibility Scrutineer or Championship Organisers as any claim to have received clarifications or rulings on the Regulations must be substantiated by the production, on demand, of written confirmation of such rulings.~~

5.2 Description:

5.2.1 General:

The Classic Saloon and Historic Touring Car Championship is for competitors participating in four-seater saloon cars marketed before 1st January 1966.

5.2.2 Eligibility:

- a. 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.
- b. The acceptance of a particular vehicle as being of saloon configuration and eligibility is subject to the approval of the Championship Organisers on an annual basis.
- c. Cars not complying with these regulations may be eligible subject to Championship Organisers approval.
- d. The responsibility to prove eligibility is that of the Competitor at all times. For clarification of a Competitor, refer to the MSA Yearbook **2018** Section B. Nomenclature & Definitions.
- e. Proof of a vehicles' eligibility may be substantiated by production of a Historic Technical Passport (HTP) or Homologation papers stamped by the ASN. These documents, where issued, for that vehicle and these must be available for inspection when required.
- f. Where no such paperwork is available, the Competitor must produce written confirmation from the Championship Organisers as to the eligibility of the vehicle model in question. The Championship Organisers 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.

5.2.3 Unless specifically permitted in these regulations, all components must be to original Manufacturers **Standard** Specification / Pattern.

i. **STANDARD:** The word 'standard' used within these technical regulations as a description of components is to be interpreted as per 'Standard Part' defined in Section B – Nomenclature & definitions in the MSA Blue Book. Checking will be by comparison to spare parts supplied by the manufacturer's official agent, comparison to standard parts or by any other means necessary to ensure compliance. Standard Part: Is a part, the specification, features, location and method of operation of a part are as provided when new by the motor manufacturer for the model and date of car as shown on the entry form.

ii. **STANDARD PATTERN:** The phrase 'standard pattern' used within these technical regulations as a description of components is to be interpreted as per 'Standard Pattern Part' defined in Section B – Nomenclature & definitions in the MSA Blue Book. Checking will be by comparison to standard pattern part or any other means necessary to ensure compliance. **Standard Pattern Part:** A replacement part that has a similar form shape and features as the standard part and is made using similar materials and manufacturing processes e.g. a standard part, manufactured by a non-original equipment supplier that is fully interchangeable with the standard part.

5.2.4. **Classes:**

5.2.4.1 The Class Structure will be as follows, with classes based on the actual engine capacity, excluding the permitted overbore.

Class A	Over 2,700cc
Class B	1,601 up to 2,700cc
Class C	1,276 up to 1,600cc All Cooper derived Mini's Mini over 1270cc Mini - 970S Mini - 1071S
Class D	1001cc up to 1,275cc
Class E	0 to 1000cc
Class F	Lotus Cortina (see Technical Regulation 5.2.3 and 5.7.2)

5.2.4.2 **Invitation Competitors**

- a. Competitors with Vehicles not complying with these regulations may be invited to compete subject to Championship Organisers approval.
- b. Vehicles that, whilst not strictly adhering to the regulations, have been prepared sympathetically to the spirit of the championship and with Championship Organisers approval, may be invited to race under observation.
- c. Competitors wishing to race as guests must submit a written specification of their vehicle, to the Co-ordinator. It must detail all areas where the vehicle does not comply with these regulations. This specification shall be made available to the eligibility scrutineers for pre and post event checks.
- d. **Invitation** vehicles will be invited by the Championship Organisers on a race by race and individual vehicle basis. The vehicle must not deviate from the specification submitted, unless such changes are approved by the Championship Organisers. Any approval may be withdrawn at any time by the Championship Organisers.
- e. **Invitation** competitors will not eligible for: -
 - i. Podium recognition
 - ii. Championship award / trophies
 - ii. Championship points.

5.2.5. **Presentation:**

- a. At the start of each free practice, qualifying session or race, the cars must be presented to a high standard and must be clean and in good order. The Championship Organisers reserve the right to forbid cars not meeting this requirement from taking part.

- b. Presentation of a vehicle for scrutineering is a declaration by the Competitor that the vehicle is eligible for that event.

5.2.6. **Technical Checking:**

- a. The Championship Eligibility Scrutineer / Championship Organisers reserve the right to inspect, test, measure, seal or impound any component fitted to or used in conjunction with any car registered in the Championship either personally or through a nominated representative. 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. This will be the sole responsibility of the Competitor. Exceptions to this may include appeal / protest according to the MSA Yearbook.
- b. Any breach of the Technical Regulations or a breach of the procedure surrounding the Technical Regulations will be the subject of a report to the Clerk of the Course.
- c. A car found to be ineligible for the championship must race only in the invitation class and no points will be scored until the vehicle conforms to the regulations.
- d. Any component sealed by an MSA Licensed Scrutineer must remain sealed and may not be tampered with in any way. In the event of a seal needing to be broken for repair or replacement, prior to doing so the Championship Eligibility Scrutineer must be informed in writing and approve the seal being broken. Re-sealing by an MSA Licenced Scrutineer will take place after technical checks have been made at the next race meeting.
- e. If a vehicle/component is sealed for subsequent technical examination the Championship Eligibility Scrutineer, within the applicable time limit, will state to the Competitor/Competitor that he will examine the vehicle/component on a stated date and time and at a specified location and the sealed items must be made available for his inspection. These arrangements are not negotiable. If a vehicle/component is not made available for an eligibility examination as required by the Championship Eligibility Scrutineer, it will be considered as ineligible and will be reported as such to the Clerk of the Course for the application of penalties laid down under MSA Regulations and these Championship Regulations.

~~5.2.7 **Technical Passport:**~~

- ~~a. All Competitors are issued with a Technical Passport. This is used to record information relating to that car during the season.~~
- ~~b. The Competitor is responsible for the safe keeping of the passport, which shall be carried in the car at all times.~~
- ~~c. All cars are issued with a Technical Passport wallet.~~
- ~~d. No car is permitted to take part in an Event unless the Technical Passport is available for inspection and is a true reflection of the vehicle details.~~
- ~~e. The only person authorised to make changes to the details of the Technical Passport is the Series Eligibility Scrutineer or his appointed representative.~~
- ~~f. Missing Technical Passports will be the subject of a report to the Clerk of the Course.~~
- ~~g. Details contained within the Technical Passport must be submitted by the Competitor at the time of registration for the Championship. A Registration will not be accepted without submission of the relevant details.~~

5.3 **Safety Requirements:**

- 5.3.1. All MSA Yearbook, **Section K**, Competitor Safety Criteria Regulations, apply as relevant unless stated herein.

5.3.2 **Safety Roll-Over Structures:** - (K) 1 to (K)1.8) applies

- a. All vehicles must be fitted with a safety roll-over structure as defined in the MSA Yearbook **2018**, **Section K**.
- b. Interior fittings, trim and bodywork may be locally modified to allow fitting of the safety over structure roll- roll cage and any door bars.

5.3.3 **Fire Extinguisher:** (K)3 to (K)3.5) applies

- a. All vehicles must be equipped with a fire extinguisher. MSA Yearbook, 2018 Regulation (Q) 19.14.7 applies.
- b. Vehicles of Periods A-F must be equipped with a fire extinguisher in accordance with MSA Yearbook 2018 Regulation (K) 3.1.2(b)
- c. All other vehicles not detailed in Championship Regulation 5.3.3 b. must be equipped with a fire extinguisher in accordance with MSA Yearbook 2018 Regulation (K)3.1.2(a)
- d. The fire extinguisher must not be disarmed in any Parc Fermé area without the specific permission of the Championship Eligibility Scrutineer. Any Competitor that is found with a disarmed fire extinguisher in Parc Fermé for whatever reason will be penalised.
- e. The following information must be clearly displayed on each fire extinguisher:
 - i) Type of extinguishant
 - ii) Weight or volume of extinguishant
- f. It is recommended that the following information is clearly displayed on each fire extinguisher:
 - i) Capacity
 - ii) Service date of extinguisher. It is recommended that it must be less than 2 years since the filling date or the last service date
- g. During Events, all extinguisher systems must be in the 'ARMED' condition (i.e. be capable of being operated without the removal of any safety device) at all times while competing or practising, including post-Event scrutineering.
- d. The external triggering point must be positioned close to the circuit breaker (or combined with it) and must be marked by the letter "E" in red inside a white circle of at least 10cm diameter with a red edge in accordance with MSA Yearbook 2018 Regulation (K)3.2.2

5.3.4. Main External Circuit Breaker

- a. All vehicles must be equipped with an external circuit breaker. MSA Yearbook, 2018 Regulation (K) 8.1 to (K) 8.5 applies.
- b. Technical Regulation 5.3.4a. is not mandatory for cars of pre 01/01/66 construction but is recommended.
- c. The switch location must be identified by a Red Spark on a white edged blue triangle with a base of at least 12cm. and the 'On' and 'Off' positions clearly marked.
- d. The circuit breaker when 'operated' must isolate all electrical circuits, data loggers, transponders, etc.
- e. When the circuit breaker is 'operated' there must be no power source capable of keeping the engine running.
- f. The triggering system for the circuit breaker should be situated at the lower part of the windscreen mounting, preferably on the driver's side or below the rear window.
- g. On cars of Periods A to F (pre-1977) the triggering system may be mounted approximately vertically below the line of the scuttle on the driver's side.

5.3.5 Lights:

Lights detailed in Championship Regulations 5.10.5 must be in working order throughout the entire Event.

5.3.6 Seat and Seat Mounting: (K) 2.2. applies)

- a. The Seat and Seat Mounting shall comply with the MSA Yearbook 2018 Regulation (K) 2.2 and (K) 2.3
- b. It is recommended that the Driver's seat is a racing seat with a current FIA homologation.
- c. Additional seat padding is permitted to a maximum of 50mm. Any additional padding or covering placed on the seat must be fire retardant to FIA standard 8855-1999.
- d. The seat mountings shall be appropriate to the seat fitted (and complying with FIA Article 253.16) must be used.

5.3.7 Seat Belts (K) 2.1. applies)

- a. Mandatory use of seat belts. MSA Yearbook 2018 regulation Q19.14.2 applies.
- b. Where Vehicles constructed in Periods A to E have seat belts fitted, the seat belts must comply with Championship Regulation 5.3.7 c. to 5.3.6 f. inclusive.

- c. The Driver's seat belts must have a current FIA homologation.
- d. It is mandatory to use seat belts, with a minimum 'four point' configuration complying with the MSA Yearbook 2018 Regulation (K) 2.1.2.
- e. Seat belts must be worn and be correctly adjusted at all times during events: (Two shoulder straps and one lap strap, with four anchorage points on the chassis/body shell or roll over bar of the vehicle).

5.3.8 **Race Clothing: (K9.1 and K9.3 applies)**

- a. Competitors are strongly advised to wear flame resistant, socks, underwear and balaclava.
- b. Flame resistant gloves and shoes are mandatory. MSA Yearbook 2018 Regulation (Q)10.1. (c) applies.

5.3.9 **Crash Helmet.**

Crash helmets must comply with the requirements of MSA Yearbook 2018 ((K)10.1 to (K)10.4 applies).

5.3.10 **FHR.**

Mandatory for all forms of circuit racing with the exception of period defined vehicles (pre-1977), which will remain as a recommendation. MSA Yearbook 2018 (Q) 10.1.e. applies.

5.4 **General Technical Requirements and Exceptions:**

- a. All vehicles must comply with MSA General Technical Regulations and the relevant parts of **Sections J & Q** of the MSA Yearbook 2018 except where specified below
- b. 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 body shell shape, size, specification and silhouette.
- c. 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.
- d. No component may be substituted which serves to alter the shape or size of the body shell and/or panels themselves or increase the capacity of the engine unless specifically allowed by these regulations.
Full details of optional equipment must be submitted to the CTCRC for possible inclusion on a vehicle by vehicle basis prior to that item of equipment being fitted.
- e. Fixing components such as nuts, screws, washers, lock washers; spring washers, etc. are free and may be upgraded.
- f. It is permitted to repair faulty threads by the use of Keen Inserts/ Helicoils. Where thread inserts are utilised the original thread diameter and pitch must be respected
- g. 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.
- h. Advertising on vehicles is subject to the requirements set out in MSA Yearbook 2018. Regulation (H)29.1.2 & (H)29.1.3.
- i. 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.
- j. No modifications are permitted beyond the repair or adjustment processes specified by the factory or the manufacturer". Eligibility checking will be by comparison to spare parts supplied by the manufacturer's official agent.
- k. "Free" as referred to in these Technical Regulations shall mean be interpreted as "within the limitations imposed by the MSA Yearbook 2018 Regulations".

5.5 **Chassis:**

- a. The chassis as produced by the manufacturer with the original material must be retained in all aspects in respect of material, thickness & contour except as allowed in Championship Regulations 5.5 b. and 5.5 d.
- b. Strengthening of the chassis in the interest of safety, by the addition of material is permitted.
- c. Lightening or reducing of chassis, or chassis member strength, is prohibited.
- d. Seam welding is permitted.

5.5.1 Towing eyes / straps

Must be a contrasting colour to the surrounding area (usually either Day-Glo red or yellow) and must respect the requirements of MSA Yearbook 2018 (Q) 19.1.3).

- b. In addition to 5.5.1 a. it is strongly recommended that all cars must, wherever possible, be equipped with two front and two rear towing eyes positioned equally either side of the longitudinal centre-line. They must be clearly visible, marked with an arrow and the word "tow" and the wire painted in yellow, red or orange to contrast with the vehicle colour scheme.

The towing eyes must be made of at least 6mm diameter steel wire rope with a 6x19 wire core, each which must have a breaking-strain of at least 2 tons. Each towing eye must allow the passage of a cylinder with a diameter of 60 mm, situated 25mm forward of the adjacent bodywork - 100 mm above and below this hole must retain clearance to enable the recovery crews to attach straps and shackles.

The towing eye must be fixed to a structural part of the chassis with a minimum of M12 fixings, the inner part must be flexible in order for the towing eye to be retracted inside the bodywork profile. A "pull-cord" must be attached to the towing eye to enable the marshals to access the wire loop. The end attached to the chassis may be either 'thimble' or 'open-loop' style.

5.6 Bodywork and dimensions:

5.6.1 General:

- a. Bodywork must be complete and standard in shape and silhouette, material and thickness on all exterior surfaces.
- b. Where original materials are unobtainable, local repairs of adequate strength may be made using modern equivalents.
- c. Replacement of panels with non-original material is prohibited
- d. It is only permitted to make holes in **bulkhead** for the passage of cables, fuel, water, oil, hydraulic, instrument or fire extinguisher lines.
- e. All redundant holes must be covered with a non-flammable material.

5.6.2 Interior:

- a. Floor carpets, under felt, sound deadening, headlining, front and rear parcel shelves, centre consoles, the front passenger seat, rear seats and trim in the boot/luggage compartment may be removed.
- b. All internal panels and subassemblies must remain as originally manufactured. Strengthening is permitted
- c. Battery trays and their supports may be removed.
- e. The dashboard must be retained.
- f. Instrumentation is free.
- g. All interior door and rear quarter trim forward of the rearmost part of the production seating area is to be retained in either original, equivalent material of the period or other non-flammable material
- h. 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.

- 5.6.2.1 The original mirrors may be removed but vehicles must be fitted with at least one externally mounted rear-view mirror in accordance with MSA Yearbook 2018 section (Q)19.15.1) and at least one interior mirror. The fitment of a wide-angle interior rear-view mirror is recommended.

5.6.2.2 The driver must be located entirely to one side of the centre line of the car. Local modifications are permitted for the purposes of secure and safe mounting

5.6.2.3 Heaters and interior ventilation systems may be removed. It is recommended to retain a heating and de-misting system.

5.6.2.4 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 position.

5.6.3 **Exterior:**

- a. Removal of Mini bumpers is prohibited. They must be retained, "as produced and fitted" by the manufacturer.
- b. Except for Championship Regulation 5.6.3 a. removal of bumpers is permitted providing Championship Regulation 5.6.3 c. is respected.
- c. When bumpers are removed all supporting devices and brackets as would otherwise protrude beyond the bodywork must also be removed.
- d. Reworking or modification to exterior bodywork is prohibited except for items detailed in Championship Regulation 5.6.3 e.
- e. Any part of the arch/wing pressing folded into the wheel arch may be deformed, but not removed, to give clearance to the tyres.
- f. Bonnet and boot shut lines must be as in production.
- g. The original boot and bonnet fasteners may be removed.
- h. Boot and bonnet hinges are free
- i. Radiator grill slats must not be removed unless they are less than 1" apart and if so alternate slats may be removed.
- j. Vehicle registration marks (number plates) must be displayed front and rear. They must be able to satisfy the requirements of a Ministry of Transport Test (MoT)
- k. Jaguar Mk 1 & 2 may use accurate replica louvered bonnets as per original "John Coombs" cars.
- l. 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 over-riders).
- m. It is permitted to remove bonnet outer skin support frame / stiffening metalwork.
- n. It is permitted to remove boot outer skin support frame / stiffening metalwork.

5.6.4 **Ground clearance:**

- a. Minimum ground clearance is 4" (100mm) excluding exhausts and silencers.
- b. Will be measured without the Driver on board
- c. Will be measured with the vehicle in the condition in which it cross the finish Line or at any other time during an Event and without the removal of any solid or fluid matter including fuel.
- d. Ride height will be measured on any reasonably flat surface as deemed by the Championship Eligibility Scrutineer or his nominated representative. In the event of any discrepancy the circuit designated flat patch will be used to make any final judgement

5.7 **Engine:**

5.7.1 **General:**

- a. Engine components are free providing the requirements of Championship Regulation Section 5.7 are respected
- b. To allow for Scrutineers wire seals, every installed engine must have 1.6mm (1/16") holes drilled in readily accessible locations as follows: -
 - i) Sump: - Cross drilled through two adjacent retaining screws or studs.
 - ii) Rocker/cam cover or cylinder head bolts: - Cross drilled through two adjacent retaining screws, studs or bolts.

- c. Engines may be sealed at any time by a Licensed Eligibility Scrutineer and only by written permission in advance from the Championship Organisers or a Licensed Eligibility Scrutineer may seals be broken.

5.7.2 **Class A:** (except Ford Mustang and Ford Falcon) **and Class F.**

- a. The original standard production cylinder block may be used
- b. It is permitted to use an alternative cylinder block, manufactured to the same original production specification, including, but not limited to material, bore, number of main bearings and number of main bearing fasteners
- c. It is permitted to re-bore the standard size cylinder block up to a maximum of plus 0.065"(1.651mm)
- d. The crankshaft is free if the requirements of Championship Regulations 5.7.2 e. and 5.7.2 f. are respected.
- e. The original stroke of the crankshaft must be retained.
- f. The original number of crankshaft bearings must be retained.

5.7.3 Ford Mustang and Ford Falcon:

- a. Permitted Cylinder Block
- b. Standard production cylinder block.
- c. Pre-1985 standard production (2 bolt mains) 302 cubic inch cast iron cylinder block.
- d. Cylinder block available as part number M6010-A50.
- e. It is permitted to re-bore the standard size cylinder block in use up to a maximum of plus 0.065" (1.651mm).

5.7.4 Cylinder block: Class B, C, D, & E:

- a. Free, if the requirements of Championship Regulations 5.7.4 b. to 5.7.4 h. inclusive are respected.
- b. It shall be of the "same family", manufactured by the same manufacturer in the original material and approved by the Championship Organisers.
- c. It is permissible to remove metal from the cylinder block.
- d. It is permitted to re-bore the standard size cylinder block in use up to a maximum of plus 0.065" (1.651mm)
- e. Ford Anglia may use a pre- cross flow production 1,498cc cylinder block.
- f. Mini may only use a "British home market" engine block.
- g. The original production bore (excluding permitted overbore) and stroke for the block in use must be retained.
- h. Within these Technical Regulations the word "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

5.7.5 **Cylinder Head:**

- a. The cylinder head is free provided that the requirements of Championship Regulations 5.7.5 b. to 5.7.5 i. inclusive are respected.
- b. The cylinder head must be manufactured to the same original production specification as the original standard production cylinder head.
- c. The cylinder head shall be manufactured from the same material as the original standard production cylinder head configuration and operating type as the original standard production cylinder head.
- d. The cylinder head shall fix directly onto the original standard production cylinder block without any modification.
- e. It is permitted to remove metal from cylinder head.
- f. The Ford "Kent" crossflow cylinder head is not permitted.
- g. Jaguars may use a straight port head.
- h. 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

- i. Vehicles fitted with side valve engine may employ a proprietary OHV conversion (cylinder heads, manifolds and carburettors) marketed for that engine before 1st January 1966.
- j. The engine must be located in the original position.

5.7.6 Oil/Water Cooling:

- a. The main radiator is free but must remain in its original location and be of the original type. (Complete with header and pressure cap etc.)
- b. The fitting of additional water radiators is permitted provided they are located within the periphery of the bodywork.
- c. The fitting of additional oil coolers is permitted provided they are located within the periphery of the bodywork.
- d. Modification of the cooling system is permitted to facilitate the installation of items detailed in Championship Regulation 5.7.6 a. to 5.7.6 c. inclusive.
- e. Dry sump oil systems are prohibited.
- f. The Hilman Imp is permitted to use a front mounted radiator system providing:-
 - i. The radiator matrix must be located within the spare wheel area.
 - ii. The radiator matrix must be confined within the front bonnet area.
 - iii. ~~The radiator matrix must not be visible from the exterior of the vehicle.~~

5.7.7 Induction Systems:

5.7.7.1 Class A

- a. The production or homologated carburetion must be fitted.
- b. Carburetion may be "gas-flowed" by polishing.
- c. Internal removal of metal is permitted provided that the requirements of Championship Regulation 5.7.7.1d. is respected.
- d. The intake and outlet flange dimensions must remain as original.

5.7.7.2 Classes B, C, D & E

- a. Carburetion must be that used in the period or equivalent but is otherwise free.
- b. Alfa Romeo Giulia Sprint GT may use twin 45DCOE Weber carburettor as fitted to the Ti Super model.
- c. Ford Mustang/Falcon may use any Holley 4150 or 4160 (1.6875" Flange dimension) carburettor.
- d. Jaguar Mk 1, 2 & S Type may use twin 2" SU carburettors.

5.7.7.3 Class F

- a. Ford Lotus Cortina must use twin 40DCOE unless entered to Appendix K in which case must use twin 45 DCOE.

5.7.7.4 Forced induction or fuel injection is only permitted if fitted as original equipment.

5.7.7.5 Supercharged or turbocharged engines shall be subject to a capacity equivalent of 1.4:1.

5.7.7.6 Inlet manifolds are free.

5.7.7.6 Rear engine cars may have additional air intakes in the rear Plexiglas but must not produce a ram air effect.

5.7.8 Exhaust Systems:

- a. The exhaust system is free subject to compliance with the MSA Yearbook 2018 Regulation (J)5.16.

5.7.9 Ignition Systems:

- a. The ignition system is free if the requirements of Championship Regulations 5.7.9 b. to 5.7.9 h. inclusive are respected.
- b. The distributor may be fitted with an after-market spark-triggering device.
- c. The distributor must remain in its original position.

- d. The distributor must maintain its original function.
- e. Any additional system which processes information acquired from the ambient conditions and/or the engine is prohibited.
- f. The distributor must be the only means of determining ignition advance and retard.
- g. The distributor must be the only means of distributing the high-tension spark.
- h. The original firing order must not be changed.

5.7.10 Fuel Delivery Systems:

- a. Fuel pumps are free subject to compliance with MSA Yearbook 2018 requirements.
- b. Vehicles entered to Appendix K specification must respect the requirements of Championship Regulation 5.7.10 a.

5.8 Suspensions:

5.8.1. General:

- a. Suspension type as fitted by the manufacturer must remain unaltered.
- b. It is permitted to use pattern parts to the manufacturer's original specification

5.8.2. Suspension mounting points:

- a. The original suspension mounting points shall be used without modification.
- b. It is not permitted to modify the original location / dimensions of suspension mounting points.

5.8.3 Track Control Arms:

- a. Track control arms may be modified locally for the sole purpose of adjusting the track control arm length.
- b. It is permitted to strengthen track control arms.

5.8.4 Springs:

- a. Spring type as fitted by the manufacturer, shall be employed.
- b. Spring rate and thickness of material is free.
- c. Leaf springs are free; it is permitted to upgrade to single or multi either way.
- d. No more than the original number of springs as fitted by the manufacturer are permitted.

5.8.5 Shock Absorbers:

- a. Shock Absorbers are free providing that Championship Regulation 5.8.5 is respected.
- b. No more than the original number of functioning shock absorbers, as fitted by the manufacturer are permitted.
- c. Lever arm dampers may be changed to telescopic dampers and use new mounting points, providing the requirements of 5.8.1 and 5.8.2 are respected
- d. Cars with hydrostatic suspension may run additional telescopic shock absorbers.
- e. A Macpherson strut may be converted to a coil over damper.
- f. 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.

5.8.7 Suspension Bushes:

- a. Suspension bushes are free providing the original production bush can be replaced in its original position without modification to the bush housing.

5.8.8 Lotus Cortina suspension must meet the following measurement criteria:

- a. Distance between the front strut top mounting bolts (furthest forward measured across engine bay) = 1010mm +/- 5mm.
- b. Distance between track control arm inner mountings across front cross member = 437mm +/- 1.5 mm

- 5.8.9** 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.

5.8.10 Spherical bearings, track rod ends or rose joints are prohibited unless fitted as standard or in conjunction with Championship Regulation 5.8.9

5.8.11 It is not permitted to fit any additional suspension components, other than those permitted in Championship Regulation Section 5.8

5.9 **Transmissions:**

- a. The gearbox is free provided that it is from the same manufacturer and type as originally fitted by the manufacturer and that Championship Regulation 5.9 b. to 5.9 i. inclusive are respected.
- b. Gear levers and gear shift mechanisms are free but must employ the original method of operation, shift pattern local modification of the tunnel is permitted to allow for gear shift extensions.
- c. Quick shift gear levers are permitted. These may be fitted with reverse blocks to prevent the inadvertent engaging of reverse gear.
- d. The gearbox must remain in the original position.
- e. Gearbox mounts are free.
- f. No more than four forward ratios are permitted unless supplied as original equipment.
- g. An additional overdrive gearbox may be fitted.
- h. Gearboxes and transaxles with rapidly interchangeable ratios, or proprietary racing gearboxes, are prohibited.
- i. Sequential gearboxes and/or traction control devices are prohibited.
- j. The final drive ratio is free.
- k. The rear axle must remain in its original position.
- l. The rear axle casing must be the original standard production component.
- m. It is permitted to locally modify the rear axle for no other function than strengthening purposes.
- n. 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 Championship regulations 5.9 i. to 5.9 l. Inclusive.
- o. Drive shafts and prop shafts must be made of metallic material but otherwise are free.
- p. Mechanical limited slip or torque biasing differentials are permitted.

5.10 **Electrical:**

5.10.1 Electrical equipment is free provided that Championship Regulation 5.10.2 to 5.10.5 inclusive are respected.

5.10.2 **Vehicle On-board Starter:**

Engines are to be started at all times by the Vehicle on-board Starter except that the use of an external portable slave battery is permitted to aid start up only in the paddock, assembly area, pit lane and on the grid

5.10.3 **Battery:**

- a. The battery and starter motor must be capable of performing a number of repetitive starts.
- b. The battery type and make is free providing MSA Yearbook 2018 Regulations ((J) 5.14.1 to (J) 5.14.7) are respected.
- c. The Battery position and orientation is free within MSA Yearbook 2018 Regulations, ((J) 5.14.1 to (J) 5.14.7) applies.

5.10.4 **Charging Circuit:**

- a. Use of the 12-volt (nominal) 'standard' generator or alternator is compulsory.
- b. The Charging Circuit must be connected and operational all times whilst the engine is running.

5.10.5 **Lights:**

- a. All cars must be fitted with the following: -

- i) A minimum of two forward facing main headlights.
 - ii) A minimum of two rear facing red tail lights.
 - iii) A minimum of two rear facing red brake lights.
 - iv) A rear facing red high intensity fog light (or two where two are fitted as standard equipment by the vehicle manufacturer in question) MSA Yearbook 2018, Section (K) 5. applies.
- b. Lights detailed in Championship Regulation 5.10.5 a. iii) must be operated only by the brake pedal and without a delay.
 - c. Lights detailed in Championship Regulation 5.10.5 a. iv) must not be operated by the brake pedal.
 - d. It is not permitted to tint or paint the front or rear lighting units.
 - e. All lights detailed in Regulation 5.10.5 a. must be in working order throughout the entire Event and must be able to be switched on by the Driver when seated normally in the car.
 - f. All light lenses must be complete and standard in shape, material and thickness.

5.11 Brakes:

- a. Brake systems are free providing Championship Regulation 5.11 b. to 5.11 f. inclusive is respected.
- b. Carbon disks are prohibited.
- c. ABS systems are prohibited.
- d. Cars must be fitted with an operational handbrake.
- e. Modification or removal of brake back plates is permitted.
- f. Ducting for the purpose of cooling brakes or removing dust is permitted provided it serves no other purpose and if beneath the car respects the requirements of Championship Regulation 5.6.4

5.12 Wheels / Steering:

5.12.1 Steering:

Steering wheels and steering columns are free providing MSA Yearbook 2018 Regulations (J) 5.7.1, 5.7.2 are respected.

5.12.2 Wheels:

- a. Road wheels must be fastened by the original number of studs/bolts.
- b. Split rims are prohibited.
- c. Road wheel material is free.
- d. Wheels must be within 1" diameter of original equipment.
- e. All four wheels must be of the same diameter.
- f. Maximum permitted rim widths are:
 - Class A 7.0"
 - Class B 6.0"
 - Class C, D, E, F, G 5.5"
- g. Hub material is free.

5.13 Tyres:

- a. The only permitted tyres are from the MSA Yearbook 2018 (L)4 list 1A
- b. The Dunlop CR65. 204 compound is allowed.
- c. No modification to tread pattern or depth is allowed.
- d. All tyres must have an aspect ratio (profile) of 70% or greater.

5.14 Weights:

- a. There are no minimum weights applicable.

5.15 Fuel Tank / Fuel:

5.15.1 Fuel Tank:

- a. Fuel tanks are free subject to compliance with MSA Yearbook 2018 Regulations.

- b. Vehicles entered to Appendix K specification must respect the requirements of Championship Regulation 5.15.1 a.

5.15.2 **Fuel:**



- a. Only 'Pump' fuel as defined in section (B) Nomenclature & Definitions of the MSA Yearbook 2018 is allowed.
- b. An MSA approved additive is permitted.
- c. Fuel solely for the purpose of lead replacement is allowed.
- d. Refuelling is not permitted during qualifying, on the starting grid or during a race.

5.16 **Silencing:**

- a. All cars must conform to the current MSA noise requirements as detailed in the MSA Yearbook 2018 regulations (J)5.17 & (J)5.18.
- b. Silencers are free subject to compliance with 5.16 a.

5.17 **Numbers and Championship Decals:**

- a. Only competition numbers allocated by the CTCRC Registrar are to be displayed. They must be displayed in accordance with MSA Yearbook 2018 regulation J4 and remain as allocated until the end of the season.
- b. Competitors must display competition numbers on a CTCRC number background. CTCRC decals and those of the series sponsors, promoters and the BARC are required to be displayed in an un-obscured position in accordance with the following table.

Item		Placement
CTCRC Number Background (round or square)		One on each front door, one on the bonnet
CTCRC "classictouringcars.com" sun strip	"classictouringcars.com"	Top of Rear windscreen
Series Sponsor Sun strip	Paul Inch - Classic Race Engines Pre '66 Touring Cars	Top of front windscreen
Series Sponsor logos (if required - TBC)	TBC	One on each side of the car (front wing, rear door or rear quarter)
BARC Logo		One on each side of the car (front wing, rear door or rear quarter)
Class Letter (50mm Black lettering)	e.g. 88 A	One on each CTCRC number background, adjacent to race numbers

- c. Decals shall be fitted as issued. They may not be cut or otherwise defaced or deformed without prior approval from the Championship Organisers.
- d. Non CTCRC approved decals such as, but not restricted to, other clubs and other championship/series decals are not to be displayed on vehicles. These should be removed or covered up.
- e. A Touring Car, Touring Car re-creation or a car running in period livery is only required to display the CTCRC "classictouringcars.com" sun strip
- f. Points will ONLY be awarded to competitors correctly displaying the required decals
- g. One set of Decals may be obtained from the CTCRC nominated supplier free of charge. A charge may be levied for any extra decals required.
- h. 5.17 f. & g. are only applicable to current fully paid up, Racing members of the CTCRC

6 APPENDICES

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

6.1 The Classic Touring Car Championship is aimed at providing close racing for a wide variety of cars and it must remain a non-contact sport at all times. The Organisers acknowledge that racing incidents do happen, however there will be no acceptance of any aggressive driving of any kind. In accordance with the MSA regulations penalties will be applied to drivers who do not comply with this principle. Competitors are reminded that the majority of these cars are getting rare, to that extent parts are getting to be harder to find and most of these cars are not run on big budgets. Therefore, you are requested race accordingly, remembering this is club racing and it should be an enjoyable experience for everyone involved.

6.1.1 Social Media

Drivers and their supporters are reminded about the use of social media. Regulation 6.1.1 and 6.1.2 of the Championship Regulations clearly states the position and anyone found in breach of Regulation 6.1.1 or 6.1.2 will be dealt with accordingly. A negative or derisory comment on social media can be seen instantly by a large number of people. This may include one or more of our sponsors, hence the need for restraint. There can be, and have been, serious consequences caused by the misuse of social media. Therefore, if a driver considers that they have a genuine issue that needs resolution they should use the appropriate channel either the Championship Co-ordinator or Championship Committee

6.1.2

Anyone posting anything derogatory, defamatory, insulting, unfavourable or disrespectful in relation to the Championship or Series – including any of its participants, officials, partners or supporters – in any form of Social Media, would be dealt with in the same manner as if he comments had been published in the traditional print/broadcast media. In the worst instance, this could mean exclusion from the championship/series, in the least it will be a deduction of points.

NB: for the avoidance of doubt the MSA may of course take any action as it considers appropriate, in addition to any action taken by the Championship Stewards.

6.2 Race Organisers and Contacts:

BARC, Thruxton Circuit, Andover, Hampshire, SP11 8PN

Contact: David Wheadon

Tel: 01264 882209

Email: dwheadon@barc.net

Drivers Representative:

Contact: Colin Gibbons

Tel: 07849547868

Email: colingibbons141@gmail.com

Championship Eligibility Scrutineer:

Contact: John Wardle

Tel: 07581859085

Email: johnwardlescrutineer@outlook.com