**Sporting & Technical Regulations** 

PUBLISHED VERSION - Page 1 of 8 - Issued 02/02/16

# 1.1: TITLE & JURISDICTION:

The SPORT SPECIALS CHAMPIONSHIP is organised and administered by the 750 Motor Club Ltd 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 Championship Regulations.

- MSA Championship Permit No: CH2016/R027 1.
- MSA Championship Grade: D. 2. 3:
  - Race Status: Clubmans / National B.

### 1.2: OFFICIALS:

- 1. Co-Ordinator: G.Groombridge, The Conservatory Suite, Donington Park, Castle Donington, Derbyshire, DE74 2RP
- ① 01332 814548; 🖰 giles@750mc.co.uk).
- 2. Eligibility Scrutineer: R.Blackmore
- 3. Championship Stewards:

R.Knight K. Messer **L.Sowman** 

### 1.3: COMPETITOR ELIGIBILITY:

- Entrants must:
- (a) be fully paid up valid membership card holding members of the 750 Motor Club and
- (b) be Registered for the Championship and
- be in possession of a valid MSA Entrants Licences. (c)
- Drivers and Entrant/Drivers must:
- (a) Be current Members of the 750 Motor Club and
- (b) be Registered for the Championship and
- (c) be in possession of valid Competition (Racing) National B Licence, as a minimum
- 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)
- If participation in the Championship requires absence from education a driver, in full time school education is required to have the approval of their head teacher and a letter stating such approval from their school in order to fulfil registration for the Championship. A driver shall not take time out of their education to participate in motor sport without the prior written approval of their education
- 3. All necessary documentation must be presented for checking at all rounds when signing-on.

### 1.4: REGISTRATION:

- 1. All competitors must register for the championship by returning the Registration Form with the Registration Fee to the Coordinator prior to the Final Closing date for the first round being entered.
- 2. The Registration Fee is £120 payable upon registration.
- 3. Registration numbers will be the permanent Competition number for the Championship.

## 1.5: CHAMPIONSHIP ROUNDS:

The SPORT SPECIALS CHAMPIONSHIP will be contested over the following rounds:

Date	Circuit	Round/s
02 April	Oulton Park	2
23 April	Brands Hatch	2
21/22 May	Croft	2
26 June	Snetterton 300	2
6/7 August	Cadwell Park	2
10/11 September	Rockingham	2
1/2 October	Donington GP	2

1. Points will be awarded to Competitors listed in the Final Results as follows:-15; 12; 10; 9; 8; 7; 6; 5; 4; 3. All other finishers-2; all other starters - 1. Fastest lap per class - 1 point subject to a minimum of 2 starters in class. If there are less than 6 starters in any class, points will be 12; 9; 8; 7; 6. If there are less than 4 starters in any class,

points will be 9; 8; 7. If there is only one starter in a class, there will be no point awarded for fastest lap.

- 2. The totals from all qualifying rounds (excluding any races which are abandoned and which are not replaced) less 2 will determine the final championship points positions.
- 3. Ties shall be resolved using the formula in (W)1.3.4. in the current MSA Yearbook.
- 4. Where the race distance has been reduced (2.6.) it shall still count as a full points scoring round.
- 5. Competitors not registered for the Championship may be permitted on an individual round basis and will:
- (a) be deemed "Guest Competitors"
- (b) not score points and for the purpose of points scoring will be ignored
- (c) qualify for Event awards
- (d) comply with the eligibility criteria as prescribed in Article 1.3. above, with the exception of 1.3.1. (b) and 1.3.2. (b), as appropriate.

- 1. All awards are to be provided by the Organising Club unless agreed otherwise.
- 2. Per Round: Trophies to 1st, 2nd and 3rd.
- 3. Championship: Subject to a minimum of 5 race starts, trophies to:-1<sup>st</sup>, 2<sup>nd</sup>, 3<sup>rd</sup> overall & in each class.

Best prepared car.

- 4. Presentations: Awards will be presented at the end of each event, and/or at the end of the Championship at the designated presentation ceremony.
- 5. Entertainment Tax Liability: {deleted}
- 6. If Provisional Results or Championship Tables are revised after any presentations and these revisions affect the distribution of awards the Competitors concerned must return them to the organisers in good condition within 7 days.

# 2: CHAMPIONSHIP EVENT MEETINGS & RACE PROCEDURES

# 1. ENTRIES:

- 1. Competitors are responsible for sending in correct and complete entries with the correct entry fee prior to the closing date for entries before each event.
- 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 Meeting Organiser receives the missing or corrected information or fee.
- 3. Any withdrawal of Entry or Driver/Car changes made after acceptance of any entry must be notified to the Meeting Organisers in writing. D25.1.12. applies.
- 4. The Entry Fee for each event shall be specified in the SRs and on
- 5. Reserves will be listed in the Final List of Entries published with Final Instructions or in a Bulletin.
- 2. BRIEFINGS: Organisers should notify Competitors of the times and locations for all briefings in the Final Instructions for the meetings. Competitors must attend all briefings.

### 3. QUALIFICATION PRACTICE:

- 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. 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).
- 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

## 5. STARTS:

- 1. All cars will be released to form up on the grid prior to the start in formation as specified on the grid sheet.
- 2. The start will be via Standing start. The minimum Countdown



**Sporting & Technical Regulations** 

PUBLISHED VERSION - Page 2 of 8 - Issued 02/02/16

procedures/audible warnings sequence shall be:-

- I. 1 minute to start of Green Flag/Pace Lap Start Engines/Clear Grid.
- II.  $\,\,$  30 Seconds Visible and audible warning for start of Green Flag/Pace Lap.
- III. A five second board will be used to indicate that the grid is complete.
- IV. The red lights will be switched on five seconds after the board is withdrawn.
- **3.** Any car removed from the grid after the 1 minute stage or driven into the pits on the Green Flag lap shall be held in the pitlane and may start the race after the last car has passed the startline or pitlane exit, whichever is the later to take the start from the grid.
- **4.** Any driver unable to start the Green Flag/Pace lap or start are required to indicate their situation as per MSA Regulation (Q)12.13.2. In addition any driver unable to maintain grid positions on the Green Flag Lap, to the extent that ALL other cars are ahead of them, may complete the Green Flag lap but MUST remain at the rear of the last row of the grid but ahead of any cars to be started with a time delay.
- **5.** In the event of any starting lights failure the Starter will revert to use of the National Flag.
- **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.

### 7. PITS, PADDOCK & PITLANE SAFETY:

- 1 Pits & Paddock: Competitors must ensure that the MSA, Circuit Management and Organising Club Safety Regulations are complied with at all times.
- **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.
- **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.
- 4. Speed Limit: Pit Lane Speed Limit will be 60 km/h.
- **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.
- **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 (D)26.3.)
- **10. TIMING MODULES:** The 750 Motor Club utilises AMB transponder-based timing and competitors must have a compatible transponder fitted and working and advise the race organisers of its number prior to the event. The transponder is a TRANX 260 Direct Powered and is available from HS Sports Ltd 01260 275708.
- **11. QUALIFICATION RACES:** If any event is oversubscribed the Organising Club may at their discretion run Qualification Races.
- 12. OPERATION OF SAFETY CAR: {deleted}
- 13. ONBOARD CAMERAS: {deleted}

# 3: SPECIFIC CHAMPIONSHIP REGULATIONS

In the event of any rounds being oversubscribed the Organising Club may, in liaison with the Championship Coordinator, at their discretion run Qualification races as per 2.11 of these regulations. Alternatively at double header race meetings, should there be sufficient space within the timetable, the Organising Club may divide the grid after qualifying into 3 separate Groups. The Groups will then form 3 races whereby each competitor participates in two races. All 3 races will be eligible for full championship points.

At each Round of the championship Race 1 grid positions will be determined by each competitors fastest lap time in Qualifying. At double header meetings, the grid positions for Race 2 will be determined by the competitors second fastest lap time in Qualifying.

### 4: SPECIFIC CHAMPIONSHIP PENALTIES:

In accordance with Section C of the current MSA Yearbook and additionally:

### 4.1: INFRINGEMENT OF TECHNICAL REGULATIONS:

- **1.** Arising from post practice Scrutineering or Judicial Action: Minimum Penalty: The provisions of MSA Regulations: C3.3.
- 2. Arising from post race Scrutineering or Judicial Action:
- Minimum Penalty: The provisions of MSA Regulations: C3.5.1 (a) and (b).

For infringements deemed to be of a more serious nature the Clerk of the Course will invoke the provisions of Regulation C3.5.1 (c).

### 4.2: ADDITIONAL SPECIFIC CHAMPIONSHIP PENALTIES

- In the case of a driver being excluded from a race, the Clerk of Course will impose the penalties set out in MSA Regulation C3.5.1 a & b and may impose the penalty set out in MSA Regulation C3.5.1 c.
   In order to maintain standards of conduct, the Championship
- Organisers will monitor all Officials/Observers reports of adverse behavior at race meetings. If any individual is included on two such reports during one racing season the Championship Organisers will request the Clerk of Course at future race meetings to consider specific observation of that driver's conduct.
- 3. The Clerk of Course may impose a "Stop-Go" or "Drive through" penalty during a race in accordance with MSA Regulation Q.12.6.
  4. Any Competitor who is penalized under the Championship Sporting Regulations at any stage of a Championship event and receives an allocation of penalty points on their race license in accordance with MSA Regulations, will receive a grid slot penalty at the next round in which they compete following the allocation of penalty points, equal to the number of penalty points which were allocated. Double headers will be considered as two separate rounds; however if the decision to allocate penalty points is delayed such that further round/s of the Championship have taken place since the offence, the grid slot penalty will be implemented at the next round in which they compete after the allocation of the penalty points.

The penalty will mean that a Competitor will be moved back grid slot places from their grid position (e.g. if a Competitor with a three grid slot penalty had a qualifying time that was good enough for pole position then the Competitor will start fourth on the grid). If for any reason the imposition of this grid penalty is impractical (such as the competitors qualifying time, starting from the pit lane etc.) or the offence occurs at the final meeting of the season, a time penalty of 5 seconds will be added to the elapsed time of the Competitor.

- **5.** Championship Stewards are also empowered to consider any request from the Championship co-ordinator to penalize any Competitor for any breach of Championship regulations and, after holding a formal hearing if they deem it necessary, to impose a penalty in accordance with MSA Regulation C.2.1.1 (subject to the rights of appeal provided for in Section C.)
- **6.** One or more of the following may be imposed by the Championship Stewards as appropriate;
- a) Reprimand
- b) Fine. The may be also applied in the case of a driver receiving three reprimands from the Championship Stewards in one season.



**Sporting & Technical Regulations** 

PUBLISHED VERSION - Page 3 of 8 - Issued 02/02/16

- c) C) Time or Grid Penalties
- d) D) Suspension from all or part of the Championship. This may also be applied in the case of a driver receiving two fines from the Championship Stewards in one season.

### 5: TECHNICAL REGULATIONS

#### 5.1: INTRODUCTION:

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 must work on the principle that you cannot. The fact that some modifications are mentioned as prohibited does not imply that others are allowed.

### 5.2: GENERAL DESCRIPTION:

The **SPORT SPECIALS CHAMPIONSHIP** is for Competitors participating in cars as defined below. All vehicles must be of sound construction and mechanical condition and be well maintained. There is no requirement for an MOT Certificate, Road Tax or Insurance. Cars will run in <a href="mailto:there">three</a> classes:-

Duratec): Ford 2000cc, 16 Valve (Duratec DHE 420) engine in its 145PS form.

Zetec):Ford 'Zetec' engines as specified within 5.7.C.1, incorporating Westfield Cup Class 'Zetec' engines as specified within 5.7.D.1 and Tiger Sports Cars 'Zetec' engines as specified within 5.7.E.1. Open): Roadgoing two-seater sports specials with a maximum power to weight ratio of 340bhp/tonne (Power at flywheel land weight including driver with helmet, overalls etc). Normally aspirated engines only, limited slip differentials permitted, no 4 wheel drive. This class is intended to encompass a variety of cars, including 'one-off' specials, Caterhams with a maximum power to weight ratio of 340bhp/tonne (Power at flywheel and weight including driver with helmet, overalls etc) subject to the approval of the Championship Organisers and MX150R cars.

# 5.3: SAFETY REQUIREMENTS:

The following Articles of MSA Section K Safety Criteria Regulations will apply:- Drawing 60 (i) with reference to K1.6.4; cars over 2000cc must have a cage as per drawing 5 or 6; K5, K6, K8 – K14. Extinguishers must comply with MSA regulation K 3.1.2 a). Seat belts must be FIA homologated and as per K2.1.2, 2.1.3. or 2.1.4.

### 5.4: GENERAL TECHNICAL REQUIREMENTS & EXCEPTIONS:

1. All cars must comply with the requirements of sections **J** and **Q19** of the current MSA Yearbook. All vehicles must be of sound construction and mechanical condition and be well maintained. There is no requirement for an MOT Certificate, Road Tax or Insurance. As a minimum, two mirrors must be fitted, each with a minimum surface area of 50 sq cms and giving a clear view to the rear, one on each side of the centreline of the vehicle.

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 or by any other means necessary to ensure compliance.

- 2. The Championship Organisers will allocate a mobile rolling road that may be used to assist the Eligibility Scrutineer. At any time the Championship Organisers or the Eligibility Scrutineer reserves the right to test a vehicle on the allocated rolling road dyno machine. The Eligibility Scrutineer may use any data from the rolling road dyno machine. Competitors by registering for the Championship agree to sign any associated indemnities to allow their car to be tested on the dyno.
- 3. The use of the rolling road dyno will not measure power "at the wheels" but by measuring the rolling losses on the run down and adding these to the "at wheels" figure a theoretical flywheel figure will be obtained and this figure will be used to confirm compliance with these championship regulations. The maximum power to weight ratio for cars competing in the "Open" class will be 340bhp/tonne.

### 5.5: CHASSIS

Front or rear-engined cars are permitted.

TOWING EYES with a minimum internal diameter of 60mm as detailed in Q19.1.3 must be fitted, no higher than 18" from ground level; (note the tow eye may be of either a suitable rigid or flexible material bolted to the chassis).

### 5.6: BODYWORK – Duratec, Zetec, and Open Roadgoing twoseater sports specials:

### 1. Modifications Permitted:

- 1. General: Free
- **2. Interior**: The cockpit seen in plan view must be symmetrical about the longitudinal axis of the car. The dimensions of the passenger seat space, elbow space, foot and leg room in terms of length, width, height and volume must be at least 75% of that provided for the driver; only a fire extinguisher, a battery and any rollbar bracing may impinge upon the passenger space. Tandem seating is not permitted. It is permissible to remove interior trim and passenger seat.

#### 3. Exterior:

**ALL VEHICLES**: The engine (including carburettor & throttle bodies) and transmission must be fully enclosed. It is permitted for the air exit from a front-mounted radiator to exhaust through the top surface of the bodywork without any covering but the ducting between the bodywork and the radiator must ensure that the radiator hoses and piping are fully shielded from this ducting.

**FRONT ENGINED CARS**: Air filters may protrude through the bonnet without the need for any cover but must have an effective seal between them and the bonnet; any other holes in the upper surface of the bodywork forward of the steering wheel plus any holes in the side surfaces of the bodywork forward of the steering wheel above a longitudinal line joining the top of the front and rear wheel rims, must be covered with solid bodywork having only a forward facing opening, forward facing louvers or with a metallic gauze with a maximum hole size of 1mm; holes solely for the exhaust system do not require any cover/gauze but must be a reasonably close fit.

ALL VEHICLES must be fitted with a windscreen or an aeroscreen of minimum vertical height, measured at its attachment to the bodywork, of 75mm and a minimum width of 250mm. The passenger space may be covered by a removable tonneau cover, fitted no higher than the top edge of the bodywork. Soft-tops/hoods do not have to comply with the silhouette ruling (4.). Any car fitted with a soft-top or hardtop will be considered to be a closed car and must be fitted with a full width and height windscreen and rear screen. Front spoilers/splitters may be fitted but must not extend beyond the plan view of the bodywork. Cars which do not have full width front bodywork may be fitted with a front spoiler/splitter provided it does not extend more than 75mm beyond the plan profile of the front nose cone. Rear spoilers continuous with the bodywork may be fitted but must be no higher than 75mm above the bodywork immediately to the rear of the driver/passenger opening and must not extend beyond plan view.

# 4. Silhouette: Duratec, Zetec, Open Roadgoing two seater sports specials

The silhouette is free within that specified in 3)

## **Open Caterhams**

The silhouette must remain unaltered. Front and/or Rear spoilers are not permitted.

## 5. Ground Clearance:

Under no circumstance can any part of the bodywork, or of the suspended part of the car with the exception of the exhaust system, be below a horizontal plane passing 75mm above the ground, the car being in normal racing trim with the driver aboard. A gauge of 75mm may be used by Scrutineers before or after races or practice to check the ground clearance.

### 2. Modifications Prohibited:

- **1. General**: Kevlar, carbon-fibre and titanium materials are not permitted
- **2. Interior**. It is not permitted to mount fuel tanks within the passenger space.
- **3. Exterior**: **Aerofoils are not permitted.** No adjustable aerodynamic devices are permitted. Wheel arch extensions if used must be integrated with the body with smooth contour changes.
- 4. Silhouette: Duratec, Zetec and Open Roadgoing two-seater sports specials: Any rear underbody diffuser/undertray must not extend beyond the plan view.

**Sporting & Technical Regulations** 

PUBLISHED VERSION - Page 4 of 8 - Issued 02/02/16

Open Caterhams No modifications are permitted 5. Ground Clearance: Side-skirts or bridging devices are not permitted.

All engines must be based on series production car engines; forced induction is not permitted in any class.

Relocation of the engine is permitted provided no modifications are required to the original chassis or bulkheads (other than holes for cables or pipes). Rear-engined cars must mount the engine (and transmission) transversely which must have been mounted transversely

### 5.7. A. Duratec: All engines other than Duratec.

Not Applicable

5.7. B: Duratec: Duratec ENGINE\_(Ford 2000cc, 16 Valve (Duratec DHE 420) engine in its 145PS form)

The addition of any material, be it metal, plastic, or composite etc. by any means be it welding, bonding, encapsulation or encasement to any component is prohibited. However, specific repair of the mounting points of the cylinder block to the transmission or chassis is allowed, whilst other casting repairs may be allowed with prior written approval of the Eligibility Scrutineer responsible for the Formula. Water pump pulleys and generator drive pulleys and their retention bolts, washers and belts are free. Mechanical tachometer drives may be fitted. The use of non-standard replacement fasteners, nuts, bolts, screws, studs and washers is permitted. Freedom granted to any fastener does not allow for freedom to move items relative to each other. For components that are granted the freedom for the fitment of a key or dowel, then material may be removed to allow the fitting of the key or dowel. Only one hole or keyway per component is allowed. The use of thread locking compounds is permitted. Gaskets are free except for the cylinder head gaskets which must be standard Ford manufacture or Standard pattern for the engine. Any process of cleaning may be used on any component providing the surface finish, which must remain standard, is not affected. The expression "Standard", "Standard production" or similar expression is deemed to imply that the part has been manufactured by Ford, or a Ford Motor Company Ltd. authorised sub contractor, for specific use on a specific model of the vehicle or engine. Consequently for these rules only parts manufactured specifically for the Ford 2000cc, 16 Valve engine (Duratec DHE 420) in its 145PS form, may be used. Any machining marks on cast components resulting from manufacturing procedures will not cause disqualification. Any production deburring or imperfection removal during initial manufacture may not be modified or extended. The Scrutineer's decision will be final (based on advice from Ford Manufacturing) if a dispute arises regarding the amount of tool or other marks that are evident in any particular component. The exterior surfaces only (of the complete engine assembly) of ferrous parts and the exterior surface of the aluminium cam cover may be protected by paint or similar means. No internal component or surface may be coated by any protective finish. No rework may be carried out on any component unless specifically authorised by the regulations. The engine and associated parts must remain exactly as produced by the Ford Motor Company unless expressly detailed in these regulations. If the regulation allows a change, then that authorisation would allow the change to be carried out. However any statement defining minimum weight or dimensions does not grant permission for rework to obtain these minimum values, unless carried out in accordance with these regulations. Only Ford standard parts (parts manufactured by Ford or a Ford Motor Company authorised sub contractor) specifically for the 2000cc, 145PS version of the Duratec DHE 420 engine can be used in this series. No treatment that alters in any way the surface finish, hardness, or other property of the original production component is allowed. The only exception to this is any deposit derived from the lubrication and combustion processes naturally occurring during the

running of the engine. If in doubt contact the eligibility scrutineer or championship co-ordinator.

### 5.7.B.1 Modifications Permitted:

a) Engine. The only permitted engine is the Ford 2000cc, 16 Valve (Duratec DHE 420) engine in its 145PS form with nominal bore 87.5mm and stroke 83.1mm. Production tolerances are permitted providing the total swept volume does not exceed 2000cc.

### Fuel injection:

- i) Inlet Manifold: Free.
- Throttle Bodies: Aftermarket fuel injection with maximum 45.01mm parallel butterfly throttle bodies; the parallel section must be at least 30mm long equally disposed around the butterfly. The 750 Motor Club reserves the right to alter the maximum throttle body size or specify the fitment of restrictor plates to equalise performance, giving 21 days notice.
- iii) Fuel Injectors: Free subject to a maximum of 1 per cylinder.
- iv) Fuel Injection and management system: as per 5.7.B.14 d).

### Carburettors

- i) Inlet manifold: Free.
- Maximum size: Carburettors to be twin 48 Weber or Dellorto side-draught with 38mm chokes; chokes may be machined to the correct size from a smaller original. The 750 Motor Club reserves the right to alter the maximum choke size to equalise performance, giving 21 days notice.
- iii) Management system as per 5.7.B.14 d.
- **5.7.B.2** Exhaust System: Must comply with MSA Regulation J5.16.5 & J5.17 in the current MSA Yearbook. The exhaust manifold is free. All cars must be fitted with a catalytic converter in the exhaust system.

### 5.7.B.3 Cylinder Block:

- a) It is permitted, as means of repair, to replace cylinder bores with cast iron cylinder liners, in standard material and to standard dimensions. The liners must remain dry liners. The centre line of the cylinder bores must remain within Ford production tolerance. No offsetting of the cylinder bores is allowed. 'Nikasil' or any other types of bore plating / treatments are prohibited.
- b) The crankcase breather may be modified, including removal, as long as no air and/or oil escape from this area other than through pipework to a catch tank.
- The cylinder block may be machined to maintain deck height whilst respecting 5.7.B.5 c)
- 5.7.B.4 Cylinder Head including Valves and Valve Gear:
- a) It is permitted, as means of repair, to replace damaged valve guides and valve seats by replacement valve guides and valve seat inserts all to standard dimensions.
- b) No work which removes, adds, replaces, or transfers material is allowed on the cylinder head with the following exceptions:
  - Simple cleaning which does not alter in any way the shape of the component.
  - Minimal material removal from the head face to correct combustion chamber volume and/or reclaim head flatness. No internal rework of any combustion chamber is permitted.
  - iii) Any replacement valve seat insert must be fitted in a position that retains the standard closed valve position.
  - Threads may be cut in the standard injector holes so that threaded blanking plugs can be fitted.
- c) The cam cover assembly cannot be modified or replaced.
- d) All valve train components, other than camshaft, valve springs and simple shims under valve springs, may not be modified or replaced. The replacement tappets from Ford are permitted to accommodate valve train wear, but cannot be modified in any way unless to adjust lash length within the standard Ford range.
- Valves must remain standard, no re-profiling or polishing is permitted. The original 45 degrees (90 degrees included) seat angle must be maintained.
- Distance apart at centres (inlet)  $37.25 \pm 0.5$  mm.
- Distance apart at centres (exhaust)  $36.00 \pm 0.5$  mm.
- Maximum face diameter (inlet) 35.15 mm. h)
- Maximum face diameter (exhaust) 30.15 mm.
- Overall length (inlet)  $103.85 \pm 0.5$  mm. j)
- Overall length (exhaust) 105.05 ± 0.5 mm.
- Standard valve stem seals must be retained.



**Sporting & Technical Regulations** 

PUBLISHED VERSION - Page 5 of 8 - Issued 02/02/16

- m) Valve seat dimensions shall remain standard.
- The Exhaust Gas Recirculation (EGR) port may be sealed or filled by any means.
- **5.7.B.5 Compression Ratio:** The maximum compression ratio will be controlled as follows:
- a) Minimum combustion volume in the cylinder head (with the race spark plug fitted) = 42cc.
- Standard Ford cylinder head gasket with a minimum compressed thickness of 0.45 mm, and a minimum diameter of cylinder aperture of 89.00 mm.
- with the piston at Top Dead Centre, the piston top must remain below the top of the block (deck) by a minimum of 0.375mm (0.015"). The measurement shall be taken from the flat squish deck of the piston (not the concave bowl), to the deck height (top) of the block, without fitment of a head gasket. This measurement shall be taken in 2 positions at the extreme fore and aft of the piston in line with the piston pin. An average of the 2 measurements will be used to determine the actual dimension.
- d) The combustion chamber cannot be cleaned of carbon prior to a compression ratio check being undertaken. However, if the measured compression ratio is outside of tolerance, the eligibility scrutineer, at his discretion may allow the combustion chamber and/or piston crown to be de-carbonized in a controlled manner, prior to re-test and calculation. In all cases, this second measurement will be taken and recorded as final.

### 5.7.B.6 Camshaft:

- a) The only permitted camshaft is the Kent Camshaft Pt. No. KC750DUR145. It must be fully manufactured and ground by Kent Camshafts Ltd. It is prohibited to grind from blanks, regrind or re-profile. The serial number of the camshaft must be notified to the 750 Motor Club on the championship registration form.
- b) Only the production surface finish is permitted. Shot peening, shot blasting or polishing are prohibited. It is prohibited to modify the timing slots in the cam ends. Cam timing free. Vernier Timing Pulleys may NOT be fitted.

### 5.7.B.7 Pistons:

- a) Pistons must be standard production pistons (Part No. 1S7G-6110-DE1), or standard pattern parts unmodified in any way.
- b) All three piston rings must be fitted and piston rings must be standard production items or standard form pattern parts. The minimum weight of the connecting rod and piston assembly shall be 910 gms. (Complete piston with rings and pin, connecting rod and cap with bolts but excluding crankshaft bearings).
- c) The piston cooling oil squirt jets and the oil feed galleries to them must be retained and unmodified in any way.

### 5.7.B.8 Connecting Rods:

a) Connecting rods must be standard (Ford Part No. 1S7G-6200-AG) unmodified in any way. Polishing is prohibited. The minimum weight of the connecting rod and piston assembly shall be 910 gms. (Complete piston with rings and pin, and connecting rod and cap with bolts but excluding crankshaft bearings).
 Connecting-rod bolts are free.

# 5.7.B.9 Crankshaft:

- a) A standard crankshaft must be used. Polishing is prohibited. Crankshaft minimum weight is 13.6kg (including gearbox spigot bearing). Crankshaft journals must remain within Ford positional tolerances if a repair regrind is carried out.
- b) Crankshaft pulley and damper must be retained. Additional drives to alternator etc. may use this pulley, or extra pulleys mounted in front of the crankshaft damper.
- c) It is not permitted to alter the number of bearings or fit bearings of less than standard production width.
- d) The crank journals may be reground for reclaim, as long as the minimum crank weight is respected. Standard oversize and undersize bearings are permitted.
- The crankshaft timing chain sprocket and front pulley/damper may be fixed to the crankshaft by woodruff key or dowel.

# 5.7.B.10 Flywheel and Clutch:

a) The flywheel and ring gear must have a minimum weight of 4.6kgs (e.g. Burton FD250) and be suitable for and use a 216mm minimum diameter (8.5")clutch. Clutch assembly cover to remain standard or standard pattern but must remain conventional single diaphragm spring driven plate with four or more spring assemblies; organic friction material only is permitted; spline form and size free.

### 5.7.B.11 Lubrication System:

a) Wet sump lubrication must be retained; the sump and the oil pick up pipe may be modified or replaced. Existing standard production oilways, linings or oil grooves may be enlarged but no additional ones are permitted. Addition of material to facilitate an increase in oilway size is not permitted. Standard bearings (production or production reclaim sizes) must be retained and cannot be modified. Chamfering of the entry/exit holes of oilways is permitted; oil coolers are free.

### 5.7.B.12 Cooling System:

A liquid cooling system is mandatory. The standard production water pump must be retained and be the only mechanical method of circulating water although, through freedom on the drive to the pump, its rotational speed may be changed. The radiator and associated pipes are free. Thermostat and bypass pipes are free. Electric pumps are not permitted.

# 5.7.B.13 Fuel Delivery System: No restrictions

### 5.7.B.14 Ignition System:

- a) Spark plugs are free provided they fit the engine without any modification to the cylinder head or the spark plug and that the spark plugs place the spark gap in the same position as the production spark plug within the combustion chamber.
- b) The coil unit is free.
- c) ECU is free but must have a rev limit of 7500rpm.
- d) The engine management wiring loom is free. Any loom used must not alter the normal electrical characteristics of the inputs, outputs or sensors in any way.

### **Zetec: Zetec ENGINE**

**5.7.C.1** Ford Zetec: code RDA/RDB (105 spec), RQB/RQC (130 spec), RKA/RKB/RKC (115 spec) engines or cylinder heads are permitted subject to using 928M/958M heads. RKF/RKH/RKJ/RKK engines or cylinder heads are not permitted. No alterations to the standard engine specifications are permitted. Any modification is therefore prohibited, unless specifically allowed by these Regulations.

### **5.7.C.2 CYLINDER BLOCK:**

It is permitted as a means of repair to replace cylinder bores with cast iron cylinder liners, in standard material and to standard dimensions. The centre line of the cylinder bores must remain within Ford production tolerances. No offsetting of the cylinder bores is allowed. Max bore 80.60mm plus 0.5mm rebore allowance using standard pattern pistons.

**5.7.C.3 CYLINDER HEAD**: (Either of two cylinder heads is permitted; these are identified as the correct type of cylinder head by the casting number on the vertical face of the head, just above the exhaust manifold; the number should be prefixed by 928M or 958M). It is permitted, as a means of repair, to replace damaged valve guides and valve seats by replacing valve guides and valve seat inserts all to standard dimensions. No work which removes, adds, replaces, or transfers material is allowed on the cylinder head, except for simple cleaning which does not alter in any way the shape of the component, and minimal material from the head face to correct combustion chamber volume and/or reclaim head face flatness whilst maintaining the minimum combustion volume in the cylinder head (with spark plug fitted) 42.4cc. None of the valve train components may be modified or replaced. The hydraulic tappets cannot be modified in any way; it is not permitted to lock up the hydraulics within the tappets; valves must remain standard no reprofiling or polishing is permitted; standard seat angles must be maintained; standard valve stem seals must be retained. Inlet and exhaust ports to remain 'as cast'. Valve springs are

**5.7.C.4 COMPRESSION RATIO:** The maximum compression ratio will be controlled as follows:- Minimum combustion volume in the cylinder head with spark plug fitted = 42.4cc. Standard Ford cylinder head gasket with a minimum compressed thickness of 1.54 mm. Minimum diameter of cylinder aperture 82.00 mm. The piston may protrude a maximum of 0.65 mm out of the cylinder block with the



**Sporting & Technical Regulations** 

PUBLISHED VERSION - Page 6 of 8 - Issued 02/02/16

piston at TDC. The cylinder block, head face surface may be machined to maintain deck height.

**5.7.C.5 INDUCTION / EXHAUST SYSTEM:** Fuel injection is not permitted. Inlet manifold is free. Carburettors to be twin 40DCOE Weber with maximum of 36mm chokes; chokes may be machined to the correct size from a smaller original. Exhaust manifold design is free.

**5.7.C.7 CAMSHAFT:** The only permitted camshafts are the Kent Cams DH 61/63 Inlet and DH 62/64 exhaust, the KC75061234 inlet and exhaust, or the (uprated) Kent Camshaft KC750FZ134 inlet and exhaust. The serial number of the camshafts must be notified to the 750 Motor Club on the championship registration form. Camshafts must be fitted in the manufacturer's intended position. The camshafts must remain entirely unmodified; they must be fully manufactured and ground by Kent Cams. Camshaft timing free; cams may be dowelled to sprockets. Vernier Timing Pulleys may be fitted.

**5.7.C.8 PISTONS:** Pistons must be standard production Ford Zetec 1800cc pistons or standard pattern parts unmodified in any way except for balancing. All three piston rings must be fitted and piston rings must be standard Ford production rings or standard pattern parts. The combustion chamber face of the piston cannot be modified, other than a machining cut at 90 degrees to the stroke in order to obtain correct piston to top of block dimensions.

**5.7.C.9 CONNECTING RODS:** Ford Zetec 1800cc connecting rods must be standard. Machining is permitted to remove metal from the big end cap to achieve balance only; polishing is prohibited. Connecting rod bolts are free.

**5.7.C.10 CRANKSHAFT:** A standard Ford Zetec 1800cc crankshaft must be used; max stroke 88.00mm. Spot machining by radial drilling or milling to achieve balance is permitted. Polishing is prohibited. Crankshaft journals must remain within Ford positional tolerances if a repair and/or regrind is carried out. The crank journals may be reground for reclaim as long as standard undersize bearings are used.

**5.7.C.11 FLYWHEEL & CLUTCH:** Standard flywheel and ring gear to be used; these may be lightened subject to a minimum combined weight of 8kgs. Clutch assembly (cover and plate) to remain standard or standard pattern but must remain conventional single diaphragm spring and driven plate with four or more spring assemblies; organic friction material only is permitted.

5.7.C.12 SUMP: Design and material free, but must be 'wet' sump.5.7.C.13 Oil/Water cooling: Any system may be used for oil and water-cooling provided radiators are within the overall periphery of the vehicle.

**5.7.C.14 Exhaust systems**: Must comply with MSA Regulation J5.16.5 & J5.17 in the current MSA Yearbook. All cars must be fitted with a catalytic converter in the exhaust system.

**5.7.C.15 Ignition systems**: Free 3D mapping permitted **5.7.C.16 Fuel delivery systems**: No restrictions.

### 5.7.D.1 Zetec: Westfield Cup Class

### 5.7.D.2 Cup Class Cars with 2000cc Ford Zetec Engines:

Only engines which have been supplied by the Westfield factory are eligible.

The use of spark plugs part number 2955002 is mandatory. The engine management unit (ECU) must be part number 4073064, supplied by Westfield Sportscars.

The throttle position sensor must remain standard and in its original position.

Dry sumps are permitted.

# 5.7.D.3 Cup Class Cars with 1800cc Ford Zetec Engines:

Cars must use the standard Ford Zetec 1800cc Twin Cam 16 valve engine, twin 40DCOE carburettor and max 38mm chokes, balanced crank assembly, standard cam shaft and valves, pistons and con rods. Bore and stroke must remain as standard not exceeding 1800cc. All engine components must be original Ford, including the water pump, and to the standard 1800cc Zetec specification. Dry sump is permitted. No polishing or porting to cylinder head is permitted. Minimum weight of flywheel is 7kg. It is permitted to fit replacement pistons sourced from aftermarket suppliers provided that they are a direct replacement

for the Ford item.

It will be the responsibility of the driver / entrant to provide documentation to prove the authenticity and origin of any part of the engine. For further clarification / s, see Appendix B.

Any FCII management system may be used, Ignition Timing and

Any ECU management system may be used. Ignition Timing and performance programming is free. Drive pulleys on camshafts, crankshaft and water pump are free.

### 5.7.D.4 Cup Class: Prohibited Modifications:

Forced induction is prohibited. Competition pistons are prohibited. No other modification is permitted

5.7.D.5 Cup Class: Engine Location:

The engine must remain in its original position, using standard Westfield engine mounts.

### 5.7.D.6 Oil/Water:

Cup Class: The cooling system is free but the radiator must remain in its original position. The fitting of an oil cooler within the periphery of the bodywork is permitted. It is not permissible to fit an electric water pump

# 5.7.D.7 Induction system:

Cup Class: Inlet manifold free. Carburettor chokes - maximum size 38mm inside diameter

All cars: Must utilise a commercially available foam type air filter system. Air boxes and direct air intake systems are prohibited. Any form of device to accelerate the air flow into the air filter is prohibited

### 5.7.D.8 Exhaust Systems:

Cup Class:

2000cc Ford Zetec engine cars must use the Westfield supplied system (part nos 1712051 & 1711091). No modifications are permitted. 1800cc Ford Zetec engine cars, the exhaust is free providing it complies with MSA technical and noise regulations.

### 5.7.D.9 Ignition System:

The ignition system is free.

### 5.7.D.10 Fuel Delivery Systems:

The Fuel Delivery System is free.

### 5.7.E.1 Zetec: Tiger Sports Cars Zetec

**5.7.E.2 Zetec Engines:** No alterations to the standard engine specifications are permitted. Any modification is therefore prohibited, unless specifically allowed by these regulations.

5.7.E.3 Cylinder Block It is permitted as a means of repair to replace cylinder bores with cast iron liners, in standard material and to standard dimensions. The centre line of the cylinder bores must remain within Ford production tolerances. No offsetting of the cylinder bores is allowed. Max rebore oversize +0.5mm using standard pattern pistons. 5.7.E.4 Cylinder Head It is permitted as a means of repair, to replace damaged valve guides and valve seats by replacing valve guides and valve seat inserts all to standard dimensions. No work which removes, adds, replaces, or transfers material is allowed on the cylinder head, except for simple cleaning which does not alter in any way the shape of the component, and minimal material from the head face to correct combustion chamber volume and/or reclaim head face flatness. None of the valve train components may be modified or replaced. The hydraulic or solid tappets cannot be modified in anyway; it is not permitted to lock up the hydraulics within hydraulic tappets; valves must remain standard, no re-profiling or polishing is permitted; standard seat angles must be maintained; standard valve stem seals must be retained. Inlet and exhaust ports to remain 'as cast'. **5.7.E.5 Camshaft:** The camshafts must remain entirely unmodified; they must be fully manufactured and ground by the Ford Motor Company. Camshaft timing as standard manufacturer's settings. 5.7.E.6 Pistons: Pistons must be standard production Ford Zetec 1800cc or 2000cc pistons or standard pattern parts unmodified in any way except for balancing. All three piston rings must be fitted and piston rings must be standard Ford production rings or standard pattern parts. The combustion chamber face of the piston cannot be

**5.7.E.7 Connecting Rods**: Ford Zetec 1800cc or 2000cc connecting rods must be standard; big end bolts are free. Machining is permitted

modified, other than a machining cut at 90 degrees to the stroke in

order to obtain correct piston to top of block dimensions.



**Sporting & Technical Regulations** 

PUBLISHED VERSION - Page 7 of 8 - Issued 02/02/16

to remove metal from the big end cap to achieve balance only; polishing is prohibited.

**5.7.E.8 Crankshaft**: A standard Ford Zetec 1800cc or 2000cc crankshaft must be used. Spot machining by radial drilling or milling to achieve balance is permitted. Polishing is prohibited. Crankshaft journals must remain within Ford positional tolerances if a repair regrind is carried out. The crank journals may be reground for reclaim as long as standard undersize bearings are used.

**5.7.E.9 Flywheel & Clutch**: Lightweight Tiger flywheel and ring gear may be used. Clutch assembly (cover and plate) to remain standard Tiger fitment and must remain conventional single diaphragm spring and driven plate with four or more spring assemblies; organic friction material only is permitted.

**5.7.E.10 Sump**: Design and material free, but must be 'wet' sump **5.7.E.11 Induction Systems**:

Inlet manifold is free but removal of material in order to 'match' to cylinder head is not permitted. Carburettors to be twin 45DCOE Weber with maximum choke size of 40mm. Carburettor jets are free.

**5.7..E.12 Exhaust Systems:** Unrestricted within the provisions of MSA Regulations J 5.16.1 -5.18.11.

### 5.7.E.13 Ignition Systems:

Only Weber Alpha ECU is permitted. Maximum rev limit is 7200rpm. ECU must be accessible at all times to enable checks by the Championship organisers or their appointed representatives. ECUs may be exchanged prior to any race at the organisers discretion.

5.7.E.14 Fuel delivery system : Unrestricted

#### 5.7.F.1 Open

### Roadgoing two-seater sports specials:

The principle of this class is to limit the power to weight ratio to <u>340</u> bhp/tonne (<u>power at flywheel</u> and weight including driver with helmet, overalls etc). All registered competitors are required to submit a power curve for the car fitted with the engine being used clearly identified. This form together with a declared weight must be supplied with the completed registration form before the first race.

Engines may be modified in any way subject to the restrictions of 5.7.D.2. Engine cylinder block, crankshaft and cylinder heads must be from the same model. Cylinder heads may be modified by the removal of material. The addition of material in any form is prohibited. Design and material of sump is free. Dry sump systems permitted. Crankshaft, conrods and bolts are free.

### Caterhams

Modifications Permitted: R300, R400 and other Caterhams subject to approval of Championship Organisers limited to 340 bhp/tonne (power at flywheel and weight including driver with helmet, overalls etc); competitors must submit a power curve for the car fitted with the engine being used, clearly identified. This form together with a declared weight must be supplied with the completed registration form before the first race.

# 5.7.F.2 Modifications Permitted:

Engine capacity maximum 3651ccs two valve or 4 valve per cylinder, 4, 6 or 8 cylinder.

 $\label{lem:continuous} \mbox{Crankshaft stroke must remain standard. Dry sump lubrication is permitted}$ 

# 5.7.F.3 Modifications Prohibited:

Rotary engines are not permitted.

### 5.7.F.4 Oil/Water cooling:

Any system may be used for oil and water-cooling provided radiators are within the overall periphery of the vehicle.

# 5.7.F.5 Induction Systems:

Free but engine must be normally aspirated. Turbocharging and supercharging are not permitted. The 750 MC reserves the right to implement a maximum choke size, throttle body size or specify the fitment of restrictor plates giving 21 days notice.

### 5.7.F.6 Exhaust systems:

Must comply with Regulation J5.16.5 & J5.17 in the current MSA Yearbook. All cars manufactured after 31/12/99 must be fitted with a catalytic converter in the exhaust system.

<u>5.7.F.7</u> **Ignition systems:** Ignition systems are free.

5.7.F.8 Fuel delivery systems: No restrictions.

# 5.8: SUSPENSIONS:

### 1. Permitted modifications:

The type of suspension system, both front and rear, including springing medium and pick up points is free.

Dampers are free. Rose-joints may be used.

### 2. Prohibited modifications:

Controls which could allow adjustment of anti-roll bars by the driver whilst normally seated are prohibited.

### 3. Wheelbase/track:

### Duratec, Zetec & Open

Wheelbase free subject to MSA requirements

# 5.9.A: TRANSMISSIONS: Duratec & Zetec

### 1. Permitted modifications - Duratec & Zetec:

Cars may be either front or rear wheel drive. The gearbox and differential must be from a series production car. Front engined, rear wheel drive cars must utilise the original type of transmission as fitted to the car by the manufacturer which may be either:-

- a) A live axle from a front-engined series production car.
- b) An independent rear suspension system of which the final drive must be identifiable as being from a front-engined series production car. Differential housing is free.

Rear engined cars must utilise the original transmission as fitted to the donor engine by the manufacturer, which must have been fitted transversely in the donor car and be fitted transversely in the competing car.

### 2. | Prohibited modifications - Duratec, Zetec:

Four wheel drive is not permitted. Transaxles (ie combined gearbox/final drive, eg those fitted to 9-series Porsche, 3-series Volvo and any similar systems) are not permitted. The use of a propshaft/driveshaft between engine and gearbox is not permitted. Torque biasing, locked, limited slip differentials and electronic traction control are not permitted even if fitted as standard to the vehicle.

### 3. Transmissions & Drive ratios – Duratec, Zetec:

Gearbox and final drive ratios are free, but specialist competition transmissions are not permitted and synchromesh must be retained. Maximum number of forward ratios 5, plus mandatory reverse. Sequential change and auto-select gearboxes are not permitted. Flat shift launch controls not permitted.

### 5.9.B: TRANSMISSIONS: Open:

- **1. Modifications permitted:** Cars may be either front or rear wheel drive. The gearbox and differential must be from a series production car. Torque biasing, locked, limited slip differentials and electronic traction control are permitted.
- **2. Prohibited modifications** Four wheel drive is not permitted. Transaxles including Hewland and similar specialist competitions gearboxes are not permitted. The use of a propshaft/driveshaft between engine and gearbox is not permitted.
- 3. Transmissions & Drive ratios Gearbox and final drive ratios are free, but specialist competition transmissions are not permitted and synchromesh must be retained. Maximum number of forward ratios 6, plus mandatory reverse. Sequential change and Robotized/auto-select gearboxes are not permitted. Flat shift launch controls not permitted. Rear engined cars must utilise the original transmission as fitted to the donor engine by the manufacturer, which must have been fitted transversely in the donor car and be fitted transversely in the competing car.

### 5.10: ELECTRICS

1. Exterior Lighting: All cars must be fitted with two rear brake lights which must be fully functional at all times, all other exterior lights are optional with the exception of 5.10:2 and the following:- if fully functioning front headlamps are not fitted a pair of Daytime Running Lamps must be fitted, whichever is fitted must be switched on and working at all times that the Rear Warning Lamp (5.10:2) is in use. Blown bulbs/fuses may be replaced for scrutineering purposes.



**Sporting & Technical Regulations** 

PUBLISHED VERSION - Page 8 of 8 - Issued 02/02/16

- 2. Rear Warning Light: An LED rear fog light to EU regulation 7, an FIA homologated LED rear warning light, or an LED stop light to EU regulation 38 is mandatory and must be mounted directly to the rear or the underside of the rear roll hoop, within 10cms of the centreline of the vehicle. Any manufacturer fitted rear fog light must not be switched on unless it complies fully with this regulation.
- **3. Batteries**: A battery and starter motor capable of repetitive starts must be fitted and be operable by the driver whilst normally seated.
- **4. Generators**: A fully working alternator/generator must be fitted and electrically connected so that the standard battery charging function is providing a charge to the onboard battery.

### 5.11.A: BRAKES - Duratec & Zetec

- 1. **Permitted Modifications**: Aluminium alloy brake callipers with a maximum of 4 'pots' may be used, subject to only one calliper per wheel. Adjustment of brake-balance by the driver whilst normally seated is permitted. Handbrake not required.
- **2. Prohibited Modifications**: ABS systems are prohibited. Carbon discs are prohibited.

### 5.11.B: BRAKES - Open

- **1. Permitted Modifications**: Brake callipers free, subject to only one calliper per wheel with a maximum of 6 pots. Adjustment of the brake balance by the driver whilst normally seated is permitted.
- **2. Prohibited Modifications:** ABS systems are prohibited. Carbon or ceramic discs are prohibited.

### 5.12.A: WHEELS / STEERING - Duratec & Zetec

- **1. Permitted Options**: Steering system is unrestricted. Wheels are free subject to dimensions below.
- 2. Prohibited Options:
- 3. Construction & Materials: No restrictions.
- 4. Dimensions: Diameter free. Width max per wheel 7" front & rear

# 5.12.B: WHEELS / STEERING – Open

- **1. Permitted Options**: Steering system is unrestricted. Wheels are free subject to dimensions below.
- 2. Prohibited Options:
- 3. Construction & Materials: No restrictions.
- **4. Dimensions**: Diameter free. Width max combined total for 4 wheels 28".

### 5.13.A: TYRES - Duratec & Zetec

 Specifications: The only permitted tyres are the Yokohama AO48R in M compound and the Avon CR28 Sport

Diameter and aspect ratio are free. Tyre width maximum 205.

No alteration to the tyre from the manufacturer's specification is permitted. Re-cutting, re-grooving or in any other way modifying the tread pattern is not permitted. All the manufacturer's data must be clearly visible. Buffing of sidewalls to remove data is prohibited. The use of tyre heating/heat retention devices, tyre treatments and compounds is prohibited.

2. Nominated Manufacturers: Yokohama/Avon.

## 5.13.B: TYRES - Open

# 1. Specifications:

Any MSA <u>List 1A,1B or 1C</u> tyre is permitted. Diameter, width and aspect ratio are free.

No alteration to the tyre from the manufacturer's specification is permitted. Re-cutting, re-grooving or in any other way modifying the tread pattern is not permitted. All the manufacturer's data must be clearly visible. Buffing of sidewalls to remove data is prohibited. The use of tyre heating/heat retention devices, tyre treatments and compounds is prohibited.

2. Nominated Manufacturers: Free

### **5.14: VEHICLE WEIGHT:**

1. Minimum weights, excluding driver and including driver with helmet overalls etc (shown in brackets), are:-

Duratec: 510kgs (600kgs)

**Zetec**: 510kgs (600kgs)

**Open:** No minimum weight. The weight must be such that the power to weight ratio does not exceed 340 bhp/tonne (power at flywheel and weight including driver with helmet, overalls etc.). Note competitor must supply a weight certificate, (car driver and drivers' equipment) and power certificate with the completed registration form before the first race.

2. Maximum weights, Duratec, Zetec & Open excluding driver must not exceed 750kg

# 5.15: FUEL TANK / FUEL

- **1. Types**: Fuel tanks are free but safety tanks are recommended. A non-return valve must be incorporated in the vent system.
- **2. Locations**: It is permissible to relocate fuel tanks within MSA regulations, provided it does not contravene 5.6.2.2. On safety grounds none of the fuel filler pipework, the filler cap or associated fittings may be attached to the external bodywork.
- 3. Fuel: Only petrol as defined in Section B Nomenclature & Definitions, Pump Fuel a) section of the MSA Yearbook for the current year and complying with BS4040, BSEN228 or BS7800 may be used; fuel which exceeds the stated RON (max) levels in Appendix 1 of Section B Nomenclature & Definitions is prohibited even if it is sold/promoted as being legal for UK Competition and/or obtainable from 'roadside' pumps. The use of additives by competitors which boost the octane rating (RON) in any petrol is prohibited. At the end of practice and the race at least 3 litres of petrol from the tank of the competing car must be available to the scrutineers for analysis. Compliance with minimum weight for the car will be taken before the petrol is removed.

### 5.16: SILENCING:

All vehicles must comply with the relevant maximum noise limits set out in MSA Blue Book regulation J. Chart 5.18.

# 5.17: NUMBERS & CHAMPIONSHIP DECALS

- 1. Positions: Race numbers must be displayed on each side of the vehicle alongside the cockpit/driver and as far forward on the front of the vehicle as possible. 750 Motor Club decals must be affixed prominently near all number backgrounds. Class letters must be affixed near the number backgrounds. Championship Sponsor's decals (where applicable) must be affixed in or near the positions detailed on the diagram supplied with those decals. 750 Motor Club and Championship Sponsor's decals must take preference to any other decals. Failure to comply will render the vehicle and driver ineligible to race.
- 2. **Suppliers**: Sponsors and Club decals will be available at the first championship race in which the vehicle is entered.

### 6. APPENDICES

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