



750 FORMULA CHAMPIONSHIP 2017

SPORTING & TECHNICAL REGULATIONS

PUBLISHED VERSION - Page 1 of 7 – Issued date 21/02/2017

1: SPORTING REGULATIONS - GENERAL

1.1: TITLE & JURISDICTION:

The **750 FORMULA 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.

- 1. MSA Championship Permit No: CHR2017/ R042**
- 2. MSA Championship Grade: D.**
- 3. Race Status: Clubman/National B.**

1.2: OFFICIALS:

1. Co-Ordinator: G.Groombridge, Donington Park, Castle Donington, Derbyshire, DE74 2RP

☎ 01332 814548; ✉ giles@750mc.co.uk

2. Eligibility Scrutineer: R.Blackmore

3. Championship Stewards:

R.Knight H. Holder I.Sowman

1.3: COMPETITOR ELIGIBILITY:

- Entrants must be fully paid up valid membership card holding members of the 750 Motor Club Ltd and possess a valid current year's MSA Entrants Licence.
- Drivers must be fully paid up valid membership card holding members of the 750 Motor Club Ltd, be registered for the Championship and hold a valid MSA National B (or higher grade) Race Licence or be a professional driver in possession of a valid Licence (featuring an E.U flag) & medical issued by the ASN of a member country of the European Union (MSA Regulation H26.2.1.)
- All necessary documentation must be presented for checking at all rounds when signing-on.

1.3.4: COLLEGE CLASS ELIGIBILITY:

- The College Class will run as Class C of the Championship.
- Colleges will nominate one representative who will register as Entrant of the vehicle and will require an MSA Entrants Licence. The registration fee of £130 is payable to the 750 Motor Club upon registration of the vehicle.
- The nominated representative of the College must be a fully paid up membership card holding member of the 750 Motor Club Ltd.
- The car registered by a College may be entered by any driver authorised by that College.
- All drivers must hold a valid MSA National B (or higher grade) Race Licence or be a professional driver in possession of a valid Licence (featuring an E.U flag) & medical issued by the ASN of a member country of the European Union (MSA Regulation H26.2.1.)

1.4: REGISTRATION:

- All drivers 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.
- The Registration Fee is £130 payable upon registration. **For competitors wishing to enter a single event a registration fee of £25 is payable; if further races are entered the balance of the £130 fee must be paid.**
- Registration numbers will be the permanent Competition number for the Championship.
- If any competitor wishes to change to a different car from the one originally registered for the championship, a completed registration form with registration fee must be sent to the Co-ordinator.

1.5: CHAMPIONSHIP ROUNDS:

The **750 FORMULA CHAMPIONSHIP** will be contested over the following rounds:

Date	Circuit	Round/s
18-19 March	Donington Park GP	2
29 April	Silverstone Nat	2
27-28 May	Croft	2
8-9 July	Anglesey Coastal	2
29-30 July	Cadwell Park	2

26 August	Thruxton	2
24 September	Snetterton 300	2

1.6: SCORING:

- Points will be awarded to Competitors listed in the Final Results as follows:- 25; 22; 20; 18; 16; 14; 12; 11; 10; 9; 8; 7; 6; 5; 4; 3. All other finishers 2. All starters who fail to finish 1.
- The totals from all qualifying rounds run (excluding any races which are abandoned and which are not replaced) less 2 will determine the final championship points positions.
- Ties for end-of-season award winning places shall be resolved, when more than one competitor have equal totals, by taking into account the highest number of 1st places, 2nd places etc from the races they are counting as their best total (i.e. their finishing position in **dropped rounds** do not get taken into account). If that fails to find a winner their highest or subsequent highest dropped scores will be added to their existing total score until a conclusive result is found.
- Additionally, drivers who, during the previous 5 years have not finished in the top 3 in any 750 Formula race, the top 6 in the end-of-year positions or 1st in class B in the end-of-year positions, may register to score points in Class B as well as the overall championship. Any driver registered for Class B who finishes in the top 3 in any 750 Formula race will immediately become ineligible for Class B. For the purpose of the Class B Championship positions any points they have score to that point will be dropped, but this will not affect any other competitors, i.e. the Class B Championship points will remain unaffected.
- Cars registered for Class C will only score points in Class C, awarded as per 1.6.1.
- Where two drivers are registered in the Team Challenge and are sharing a car, their points scored (as per 1.6.1) will be combined and they will compete for the Team Challenge Awards as per 1.7.3. Each driver must contribute at least 4 scores to the team total.

1.7: AWARDS:

- All awards are to be provided by the Organising Club unless agreed otherwise.
- Per Round: Trophies to 1st, 2nd and 3rd.
- Championship: Trophies, subject to a minimum of 5 race starts, to:-
1st, 2nd, 3rd, 4th, 5th & 6th overall.
1st, 2nd & 3rd in class B.
1st in Class C.
Best Prepared car.
Highest placed non race winner (**Jeff Ward Trophy**)
Highest placed driver in a car of his own design and construction (**Bill Cowley Trophy**)
Highest placed driver in his first year in the championship (**Robin Reed Trophy**)
Highest placed driver in a car of his own design and construction in its first season of racing (**Brian Clayton Trophy**)
Highest average qualifying position (Will Johnston Jr. Trophy).
Team Challenge trophy for the team with the highest scores as described in 1.6.6.
- Bonuses:
Per Round: not applicable. Championship: not applicable.
- Presentations: Garlands and Trophies are to be provided for presentation at the end of each race. Prize money and Bonuses shall be posted to the Entrants within one month of the results being declared final after each season.
- Entertainment Tax Liability. Not applicable.
- Title to all Trophies: In the event of any Provisional Results or Championship Tables being revised after any provisional presentations and such revisions affecting the distribution of any awards the Competitors concerned must return such awards to the 750 Motor Club Competitions Secretary in good condition within 7 days.

2: SPORTING REGULATIONS - JUDICIAL PROCEDURES

Rounds & Championship: In accordance with Section C of the current year's MSA Yearbook and 4.2. of these regulations.

3: SPORTING REGULATIONS – CHAMPIONSHIP RACE MEETINGS & RACE PROCEDURES

3.1: ENTRIES:

1. Competitors are responsible for sending in correct and complete entries with the correct entry fees prior to the close of entry dates as per the entry forms.
2. Incorrect or incomplete entries (including driver to be nominated entries) are to be held in abeyance until they are complete and correct and the date of receipt for acceptance of entry purposes shall be the date on which the Secretary of the Meeting receives the missing or corrected information or fee.
3. Any withdrawal of entry or driver/car changes made after acceptance of any entry must be notified to the Secretary of the Meeting in writing. If driver/vehicle changes are made after the publication of Entry Lists with Final Instructions, the Competitor concerned will be accepted in accordance with MSA Regulation D25.1.12.
4. The entry fee for each round shall be as per the Supplementary Regulations.
5. In the event of any rounds being oversubscribed the Organising Club may, in liaison with the Championship Coordinator, at their discretion run Qualification races. For Qualification Race procedures see 3.13 of these regulations.
6. Reserves are to be nominated on the Final List of Entries published with the Final Instructions or Amendment Sheet Bulletins. Reserves will practice and replace non-qualified (including drivers practising out-of-session or qualifying by virtue of having raced at the circuit within the previous 12 months), withdrawn or retired entries in Reserve Number order. If reserves are given Grid Places prior to issue of the first Grid Sheets for any round, the times set in practice shall determine their grid positions. If Reserves are given places after publication of the grid sheet and prior to cars being collected in the Official "Assembly Area" they will be placed at the rear of the grid and be started without any time delay. Otherwise they will be held in the Pitlane and be released to start the race after the last car to start the Green Flag Lap or last car to take the start has passed the startline or pitlane exit whichever is the later. Such approval to start MUST be obtained from the Clerk of Course.
7. Acceptance of Entries: Up to Closing Day, Race meeting organisers may accept up to the maximum number of starters permitted on the Track Licence for the circuit ("the maximum"). If entries received by closing day exceed the maximum, selection will be made in order of receipt. Those in excess of the maximum and up to 20% more will be treated as 'reserves'. If the maximum has not been reached by closing day, entries received after that date will be accepted strictly in order of receipt until the maximum is reached.

3.2: BRIEFINGS:

Organisers must notify competitors of the times and locations for all briefings in the Final Instructions or Official Race Day Bulletins for the meetings. Competitors must attend all briefings.

3.3: PRACTICE:

Practice sessions will be as per MSA Regulation Q4.5. Should any practice session be disrupted, the Clerk of the Course shall not be obliged to resume the session or re-run sessions to achieve the championship criteria and the decision of the Clerk of the Course shall be final.

3.4: QUALIFICATION:

Each driver should complete a minimum of 3 laps practice in the car to be raced and in the correct session in order to qualify for selection and order of precedence as set out in MSA regulation Q4.5. Drivers practising out-of-session or qualifying by virtue of having raced at the circuit within the previous 12 months will be placed at the back of the grid. The Clerk of the Course and/or Stewards of the Meeting have the right to exclude any driver whose practice times or driving are considered to be unsatisfactory - as per MSA Regulation Q4.5.

3.5: RACES:

The standard minimum scheduled race distance shall be 13 minutes plus 1 lap but should any race distance be reduced at the discretion of the Clerk of the Course or Stewards of the Meeting, it shall still count as a full points-scoring round.

3.6: STARTS:

Unless modified by the Organising Club's Standing Regulations, the following regulations shall apply:-

1. There will be a minimum elapsed period of 3 minutes from cars being released from the Assembly Area to the start of the race or, if applicable, the green flag lap.
2. Start Procedure: A 'two minute' board will be shown on the startline; engines should be started at this stage and the grid cleared of any pit crew. A 'one minute' board will be shown, followed by a '30 second' board; a green flag will be waved from the start to commence the green flag lap. The pole position driver should set a reasonable pace during this lap and slow down on approaching the startline to allow the grid to close up. Drivers must resume their correct grid positions with the minimum of delay. Any drivers unable to start the green flag lap or start the race are required to indicate their situation as per MSA regulation Q12.13.2. Drivers may make up any lost grid position during this green flag lap, BUT any drivers unable to maintain grid position 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.
3. A '5 second' board will be displayed when the grid is stationary. Approximately 5 seconds after this board is withdrawn the red lights will be switched on; after between 2 seconds and 7 seconds they will be switched off to start the race. In the event of the failure of these lights a National Flag will be used to start the race.
4. Any car removed from the grid or driven into the pits after leaving the Assembly Area shall be held in the pitlane and may start the race after the last car to take the start from the grid has passed the startline or pit exit lane whichever is the later.
5. Excessive weaving to warm-up tyres - using more than 50% of the track width - and falling back in order to accelerate and practice starts, is prohibited.

3.7: RACE STOPS:

As per MSA Regulation Q5.4 to 5.4.3 of the current MSA Yearbook.

3.8: RE-SCRUTINY:

All vehicles reported involved in contact incidents during races or practice must be re-presented to the Scrutineers before continuing in the races or practice.

3.9: PITS AND PITLANE SAFETY:

1. Pits: Entrants 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 drive at minimum speeds in pit lanes.
3. Refuelling may only be carried out in accordance with the MSA Regulation Q13, Circuit Management regulations and the SRs or Final Instructions issued for each Circuit/Meeting.

3.10: RACE FINISHES:

After taking the chequered flag drivers are required to: - Progressively and safely slow down, remain behind any competitors ahead of them, return to the pitlane entrance as instructed, comply with any directions given by Marshals or Officials and to keep their helmets on and harnesses done up while on the circuit or in the pitlane.

3.11: RESULTS:

All Practice timesheets, grid sheets and 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.

3.12: TIMING MODULES:

The 750 Motor Club utilises 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. Compatible transponders include the AMB TRANX 260 and MyLaps X2.

3.13: QUALIFICATION RACES:

If on closing date the number of entries received is appreciably more than the maximum number of starters permitted, the race meeting organisers will endeavour if feasible within the timetable, to run practice sessions and races to accommodate all entries, but are not obliged to do so. If the conditions for the practice sessions are significantly different, the grid for the heat will be filled by taking alternately from each session the slowest drivers until the grid is full; the remaining drivers will form the front portion of the grid for the final and spaces will be filled by taking the top finishers in the Heat.

3.14: CANCELLED/ABANDONED RACES:

There may be occasions when, due to circumstances on the day, a scheduled race is not run, a race meeting is abandoned or the circuit curfew is reached. The 750 Motor Club has the right to replace those races at another race meeting in the same season; preference will be given to a race meeting where the affected formula is already scheduled to race. This will be done via issue of a Championship Bulletin. No change of vehicle will be permitted without the permission of the Championship Stewards and then only in exceptional circumstances.

A: The qualifying session for a race/s does not take place.

Entry for the replacement race will be restricted to those who were 'signed on' for the race which is being replaced. A separate qualifying session will normally be held. If no space can be found for a replacement race, the number of championship scoring rounds will be adjusted accordingly.

B: The qualifying session for a race/s has taken place, but the race did not come under starters orders.

Entry for the replacement race will be restricted to those who were qualified for the race which is being replaced; the grid for the cancelled race will be used for the replacement race. If no space can be found for a replacement race, the number of championship scoring rounds will be adjusted accordingly.

C & D below apply if a race is 'red flagged' once.

C: A race is 'red flagged' before the leader has completed two laps, but there is no time available to restart the race.

Entry for the replacement race will be restricted to those who would have been able to restart the race which is being replaced; the grid for the cancelled race will be used for the replacement race. If no space can be found for a replacement race, the number of championship scoring rounds will be adjusted accordingly.

D: A race is 'red flagged' after the leader has completed two laps but less than 75% of its duration, but there is no time available to implement MSA regulation Q5.4.2.

If the Clerk of Course decides that a replacement race should be run it will be in accordance with MSA regulation Q5.4.2. If no space can be found for a replacement race, a result will be declared retrospectively based on the order of crossing the finish line at one lap less than at the first time of the showing of the red flag and only cars which were under their own power at the showing of the red flag will be classified.

If a race is 'red flagged' twice and the second red flag is before the leader has completed two laps, the Clerk of Course may decide to rerun the race on the same day subject to circuit curfew but is not obliged to do so. If the decision is taken that it should not be rerun on the day or it cannot because of circuit curfew, it will be considered an abandoned race and the number of championship scoring rounds will be adjusted accordingly.

3.15: Additional Sporting Regulations issued for the Championship.

1. Any driver competing in the Championship may be called before a meeting of the Championship Stewards who, at their discretion, may take further action that could include exclusion from part or all of the Championship.
2. The Organisers will use any evidence available to them to request that the Championship Stewards investigate any drivers who are deemed to show poor driving standards or bring the championship into disrepute in any such manner through on and / or off track incidents. This will include any complaints made officially by registered competitors.
3. Championship Stewards are also empowered to consider any request from the Championship co-ordinator to penalise 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).
4. One or more of the following may be imposed by the Championship Stewards as appropriate:
 - a) Reprimand.
 - b) Fine. This may be also applied in the case of a driver receiving three reprimands from the Championship Stewards in one season.
 - c) Time Penalty.
 - 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.
 - e) Disqualification.

4: CHAMPIONSHIP RACE PENALTIES:

In accordance with Section C of the current MSA Yearbook

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:

1. 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.
2. In order to maintain standards of conduct, the Championship Organisers will monitor all Officials/Observers reports of adverse ~~behavior~~behaviour 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.
- c) ~~Time or Grid Penalties~~
- 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.

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. It applies to the specified component/s from the manufacturer's parts list for the model / engine shown on the entry form or registration form. No modifications permitted beyond the repair or adjustment processes specifically specified by the manufacturers' workshop manual or microfiche.' Checking will be by comparison to spare parts supplied by the manufacturer's official agent or by any other means necessary to ensure compliance.

5.2: GENERAL DESCRIPTION:

The **750 FORMULA CHAMPIONSHIP** is for Competitors participating in two-seater, front or rear engined, open or closed sports-racing cars.

5.3: SAFETY REQUIREMENTS:

The following Articles of MSA Section K Safety Criteria Regulations will apply: K1.6.4 or K1.5; K2.1.3, K2.1.4; K3 – K14. Extinguishers must comply with MSA regulation K 3.1.2 a). Seat belts must be FIA homologated in accordance with Q19.14.2. Towing eyes to be in accordance with MSA Regulation Q19.1.3; (note the tow eye may be of either a suitable rigid or flexible material).

5.4: GENERAL TECHNICAL REQUIREMENTS & EXCEPTIONS:

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. 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.

5.5: CHASSIS:

1. The chassis must be constructed from metal. Chassis components must not be constructed using carbon fibre, kevlar or composites containing these materials.

2. At the rear of the driver/passenger space, the chassis must be at least 76.2cm (30in) wide to the inside of the chassis panels such that it must be possible to drop into the driver/passenger space through the driver/passenger space opening at right angles to the longitudinal centre line of the car an inverted 'U' shaped member with legs 76.2cm (30in) apart (measured over the outside of the legs) held vertically so that the difference in height of the legs does not exceed 76mm (3in) when one of the legs is on the lowest floor level.

3. The longitudinal centre line of the driver's seat must be at least 17.8cm (7in) from the longitudinal centre line of the car.

4. The passenger space, must be large enough to accept fully a trapezoidal volume with front and rear faces lying on two planes, both perpendicular to the longitudinal centre line of the car and separated by 70cm (28in). The front face should be a rectangle measuring 15cm (6in) wide and 25.4cm (10in) high. The rear face should be a rectangle measuring 27.9cm (11in) and 25.4cm (10in) high.

Nothing may be located in the passenger space except a fire extinguisher and any ballast required to comply with the minimum weight regulation.

5. The driver/passenger space must be clear of and not divided by any chassis members other than those forming the propshaft tunnel in front engined cars, roll over bar braces or for location of the gear change linkage in rear engined cars. Cars that do not have a transmission tunnel may have a vertical, longitudinal bulkhead between the driver and the passenger space. This must be no more than 2.5cm wide and no more than 30cm high.

5.6: BODYWORK:

1. Modifications Permitted:

1. Cockpit:

i) There must be only one cockpit opening to serve both driver and passenger space. The opening must be large enough to accept, with its longest side transversely at the rear of the opening, a horizontal quadrilateral frame with hinged joints, one side 81.3cm (32in) long, two opposite sides 45.7cm (18in) and the fourth side 63.5cm (25in). In checking, neither rear internal angle of the quadrilateral frame may exceed 92° and neither front internal angle may exceed 120°. (See appendix 6.1 for diagram.)

ii) In checking the cockpit opening any obstruction caused by the bracing members for a roll over bar may be ignored.

iii) Closed cars must provide similar unobstructed area at drivers/passenger shoulder level.

2. Passenger space: Any cover over the passenger space and/or forming an extension to the windscreen alongside the driver must be constructed only of supple and flexible fabric and must be easily removable, or if of a rigid material to comply with Q19.2.3.

3. Interior: As defined above.

4. Exterior:

i) Aerofoil devices ahead of the front wheels are permitted, but must be below the top of the front wheel rims and not exceed in width the centre line of the front tyres. They must form a continuous part of the bodywork.

ii) A rear aerofoil is permitted. Chord must not exceed 30cm (11.8in). Maximum width to be full body width or outermost track whichever is the greater.

iii) Any rear aerofoil or bodywork must not overhang the rear of the vehicle by more than 70cm (27.5in) measured from the centre line of the rear wheels. The height of any bodywork or aerofoil must not exceed 90cm (35.4in) with the driver aboard, measured from the ground, excluding safety roll over bars, or bodywork of closed cars between the centre line of the front and rear wheels.

iv) Any forward facing horizontal splitter attached to the lowest edge of the front bodywork may not exceed the maximum overall width of the wheels or bodywork whichever is the greater.

5. Silhouette: Not applicable.

6. Ground Clearance: As per MSA regulation J5.20.11. Cars failing



this ride height check on wets may be fitted with wheels and slick tyres as specified in 5.13 of these Regulations for the purpose of the ride height check.

2. Modifications Prohibited:

1. **General:** Any in contravention of 5.6.1.
2. **Interior:** Any in contravention of 5.6.1.
3. **Exterior:** There shall be nothing to obstruct wholly the driver's sight from the normally seated position of another car to the front or either side.
4. **Silhouette:** Any in contravention of 5.6.1.
5. **Ground Clearance:** Any in contravention of 5.6.1.

5.7: SUSPENSIONS:

Suspension systems are free, subject to MSA regulations and with the following exceptions:
Suspension components must not be constructed using carbon fibre, kevlar or composites containing these materials.

5.8: ENGINE:

The engine must be a Fiat FIRE engine of 1108cc capacity and the only parts permitted are those originally fitted to the 1108cc FIRE engine or pattern parts to the same design and made of the same materials as the standard Fiat part fitted to the engine specified above.

The cylinder head must be a standard FIAT component bearing the casting number 46400108, located above number 2 exhaust port.

Two camshaft cover bolts (one on each side of the engine) must be drilled to allow the engine to be sealed by the Scrutineers. Two sump bolts (one each side of the engine) must be drilled to allow the engine to be sealed by the Scrutineers. The two sump bolts should be longer than standard so that they protrude above the sump flange block and be drilled in the extended thread area so as to ease access by the Scrutineers.

The only modifications permitted are those listed below. It is the competitor's responsibility to ensure that no prohibited modifications have been carried out whether or not they have assembled the engine.

1. Modifications Permitted:

i) Either the standard ferrous Fiat flywheel or a steel flywheel must be used. If the standard ferrous Fiat flywheel is used it can be modified by the removal of material only and the original manufacturer's logos must be visible on the engine side of the flywheel. If the original manufacturer's logos have been removed the flywheel must have a minimum mass of 3.5 kg. The standard Fiat ring gear must be mounted directly and solely on the Fiat flywheel. The clutch cover must be bolted to the Fiat flywheel.

If a steel flywheel is used it must have a minimum mass of 3.5 kg and the same ring gear dimensions as the standard Fiat item. The clutch cover must be bolted directly to the steel flywheel.

- ii) Lubrication system is free and may be either dry or wet sump.
- iii) Clutch Pressure plate must have a minimum diameter of 180mm or be as is/as has been fitted as standard to a Fiat FIRE engine; friction plate is free.
- iv) Rebore permitted up to + 0.6mm using standard pattern pistons only. The wear allowance on bores is 0.2mm measured at the maximum point of piston ring travel.
- v) Replacement of valve guides and valve seats is permitted with parts of standard pattern and material. Valve seat inserts must not protrude beyond the combustion chamber surface.
- vi) Metal may be removed from the crankshaft, pistons and connecting rods for balancing purposes only. In the case of pistons and connecting rods, one component must be left with completely original machining. The crankshaft can be balanced by local grinding or spot

drilling only and at least one counterbalance weight must remain as standard.

vii) Facing of the head and block is permitted within the constraints of the standard cam belt and pulley system. No other modifications to the cylinder head are permitted.

viii) Removal of the original mounting lugs from the outside of the block is permitted for the sole purpose of facilitating engine installation.

ix) The only permitted camshaft is the item supplied by Newman Cams (see 6.2 of these regulations); the serial number of the camshafts must be notified to the 750 Motor Club on the championship registration form. The last 10mm of control camshaft lobes may be reduced in width to a minimum of 22.15 mm. Valve springs and shims are free but only single springs may be used and spring seats may not be machined. Offset dowels or Vernier camshaft pulley are permitted.

x) The cylinder head may be drilled and tapped (or helicoiled) and plugged to blank the water take-off for the inlet manifold.

xi) Helicoil inserts are permitted to repair damaged threads in cylinder block and cylinder head.

xii) Three angle valve seats are permitted on the valve seat inserts. The valves must retain the standard Fiat shape and profile.

xiii) Non-standard external fasteners on engine block and head are allowed. For clarity, this is any fastener that can be accessed with the sump and cam cover fitted normally.

xiv) Core plugs may be retained by mechanical fastening.

xv) The standard method of locating the crank pulley to the crank may be modified for the sole purpose of locating the pulley more securely.

2. Modifications Prohibited:

Any not listed in 5.8.1 including but not limited to:

- Polishing or removal of metal from the inlet or exhaust ports.
- Polishing, removal or addition of material from/to the combustion chamber.
- Polishing of connecting rods.
- Reprofitting of camshafts or regrinding of camshafts from blanks
- Use of electric water pumps; the standard water pump must be used
- Lightening of engine components with the sole exception of the flywheel.

Other engine regulations

3. **Location:** Front or rear.

4. **Oil/Water cooling:** Free within overall periphery of bodywork.

5. **Induction Systems:** Carburetion shall be by only one carburettor choke. Forced induction, fuel injection and external slide throttles are prohibited. Throttle operation must be solely under the control of the driver. Other than opening or closing the throttle, the carburettor may not be adjusted while the vehicle is in motion either by mechanical or electrical means.

6. **Exhaust systems:** Exhaust systems including manifold are free but must comply with MSA regulations J 5.16.1 – 5.16.5.

7. **Ignition systems:** Only ignition systems that use only one trigger, inside the distributor or external, to initiate the low tension current will be permitted. Any system that requires more than one sensor or input to provide another signal/voltage for any electronic/microprocessor control system is not permitted. The use of any electronic traction control system is prohibited.

8. **Fuel delivery systems:** Free.

5.9: TRANSMISSIONS:

Gear selection and clutch operation must be solely under direct control of the driver. The gear linkage and clutch system must be purely mechanical (hydraulic clutch systems are permitted). No electrical connections, switches or sensors may operate on any part of the clutch or gear controls or linkages.

With the exception of a sensor to establish the gear position so it may be displayed to the driver, no electrical connections, switches or sensors may operate on any part of the clutch or gear controls or linkages. If a gear position sensor and display are fitted, they must use a discrete loom whose only common connection to other electrical systems may be at the power supply.



At least two mounting bolts must be drilled so that the gearbox can be sealed to the engine by the Scrutineers for inspection of the gearbox and the flywheel.

Automatic transmissions are prohibited. Torque biasing, locked or limited slip differentials are all prohibited.

Cars must have an operable reverse gear capable of being engaged by the driver whilst normally seated.

Only the rear wheels may be driven, either a) via a live rear axle or b) via a standard Fiat transaxle.

A. Live rear axle

For all cars not using a standard Fiat transaxle, a bevel-driven, live rear axle from a series production car must be the sole means of driving the rear wheels.

1. Permitted modifications: It is permitted to add brackets for mounting suspension and/or braking systems. The axle may be modified to accept longer or shorter half shafts.

2. Prohibited modifications: Magnesium alloy bell housings, gearbox casings and tailshaft housings are all prohibited.

3. Transmissions & Drive ratios: The gearbox must not contain more than four forward gears and one reverse gear. Gearbox and axle ratios are free.

B. Fiat transaxle

For all cars not using a live rear axle, a standard five speed Fiat **synchronesh** transaxle as fitted to a transverse engine car must be the sole means of driving the rear wheels. The transmission must be mounted to the engine in its original *plane* such that the gearbox mainshaft axis must remain in line with the engine main bearings axis.

1. Permitted modifications: The gearbox may be rotated relative to the engine about the crankshaft axis; a spacer of up to 12mm may be used between engine and gearbox to facilitate this. The standard 5th gear ratio pair may be replaced with a 1:1 gear ratio pair.

2. Prohibited modifications: Removal of the synchronesh units from the gearbox is prohibited.

3. Transmissions & Drive ratios: The gearbox must contain five forward gears and a reverse gear all capable of being engaged by the driver whilst normally seated. With the exception of the 5th gear referred to in 5.9.b.1 above, only standard Fiat gears can be used. There must be a minimum of 81% difference between 1st and 2nd gear ratios. Only the following final drive ratios are permitted: 4.071:1, 3.867:1, 3.563:1.

A system of gear ratio validation is applied which uses the recognised MSA scrutineer's seal. A hole must be drilled at the gearbox casting joint to enable locking wire to be passed through. When gear ratios are checked and passed as being correct by a scrutineer the gearbox will be sealed by this method. If at any time this seal is broken the ratios must be rechecked. No points may be scored by a driver whose car has unchecked ratios.

5.10: ELECTRICS

1. Exterior Lighting: Not applicable.

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 in accordance with MSA regulations.

3. Batteries: An electrically powered starter motor and battery are mandatory. The starter motor must be operable by the driver whilst normally seated. The battery must be capable of repetitive starts.

4. Generators: A charging system is optional.

5.11: BRAKES

1. Permitted Modifications: Free, subject to 5.11.2.

2. Prohibited Modifications: ABS is not permitted.

5.12: WHEELS / STEERING

1. Permitted Options: Free.

2. Prohibited Options: Any in contravention of MSA regulations.

3. Construction & Materials: Free.

4. Dimensions: Free.

5.13: TYRES

The use of tyre heating/heat retention devices, tyre treatments and compounds is prohibited.

1. Wet Tyres: Wet tyres are free but as a minimum the tread pattern must have at least four circumferential grooves of at least 7mm width equally spaced across the tyre and of minimum 1.6mm depth or be a full wet pattern as defined in 6.3. Wet tyres must be fitted to wheel rims up to a maximum width of 8 inches.

2. Slick Tyres: Slick tyres must be the YOKOHAMA radial, size 160/520/R13, code no: N2669. Size and code numbers must be clearly visible.

5.14: VEHICLE WEIGHT:

All cars are subject to a minimum weight of 460kg including driver. Ballast (if required) must be fitted in accordance with MSA regulations J5.15.1 to J5.15.4.

5.15: FUEL TANK / FUEL

1. Types: Free. A non-return valve must be incorporated in the vent system.

2. Locations: Free, subject to MSA regulations.

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. 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. No decals other than those issued or approved by the 750 Motor Club are permitted. Those currently approved by the Club are:-

BWRDC	750Formula.co.uk
EBC Brakes	Registered Charities
Driver name & blood group	Make & model of car

Additionally, cars in Class C may carry the name of the College on the vehicle.

2. Suppliers: Sponsors and Club decals will be available at the first championship race in which the vehicle is entered.

6. APPENDICES:

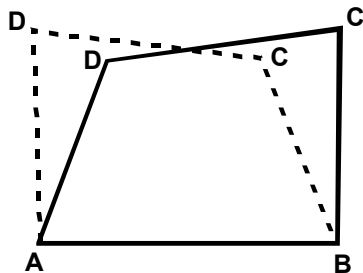
6.1: Diagram re Cockpit opening (NOT to scale):

ABCD represents the horizontal quadrilateral frame with hinged joints (referred to in 5.6.1.(i)) which has to fit into the cockpit



opening. The solid and dotted lines show the frame at the extreme positions, dictated by the internal angles.

Dimensions of the frame are:
 AB = 81.3 cms; BC & AD = 45.7 cms; CD = 63.5 cms.



6.2: CAMSHAFT SUPPLIER: Cams are available through the club. Please contact: Giles Groombridge, Competitions Manager

The Seven Fifty Motor Club
 Donington Park
 Castle Donington
 Derbyshire
 DE74 2RP
 Tel: 01332 814548

www.newman-cams.com

New chassis & bodywork are being built for 750 Formula by Martin Kemp
 Phone: 07731 943717
 Website: www.racekits.co.uk

Appendix A – Engine Dimensions
 All dimensions in millimetres

Bore	70
Stroke	72
Maximum overbore	Subject to 5.8.1(iv)
Minimum valve stem diameter (non waisted section)	6.95
Minimum valve stem diameter (waisted section)	6.10
Cam follower diameter	34.975-34.995
Inlet valve head size	31.2-31.5
Exhaust valve head size	27.2-27.5
Valve shim thickness	3.2-4.7
Top piston ring width	1.175-1.19
Middle piston ring width	1.175-1.19
Bottom piston ring width	2.475-2.49

6.3: Wet tyre pattern.

Any wet tyre must have a recognisable tread pattern. This tread pattern is the combination of plain surfaces and grooves extending across the breadth of the tread and round the entire circumference.

The total width of the grooves within the tread pattern when measured across any line within a 20mm circumferential length of the part of the tyre which can contact the road and is parallel to the rotating axis of the tyre and wheel must account for at least 15% of the width of the tread and be at least 1.6mm deep. The orientation of the grooves does not necessarily have to be at 90° to the rotating axis of the wheel/tyre. E.g.

$$\frac{(A+B+C+D+E+F)}{\text{Tread Width}} \times 100 \Rightarrow 15\%$$

