



750 Motor Club Formula Vee Championship 2014



Sporting & Technical Regulations

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1: SPORTING REGULATIONS - GENERAL

1.1: TITLE & JURISDICTION:

The **FORMULA VEE 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: CH2014/R021
2. MSA Championship Grade: D.
3. Race Status: Clubman/National B.

1.2: OFFICIALS:

1. Co-Ordinator: Giles Groombridge, The Seven Fifty Motor Club, The Conservatory Suite, Donington Park, Castle Donington, Derbyshire. DE74 2RP (☎ 01332 814548; ✉ giles@750mc.co.uk).
2. Eligibility Scrutineer: D.F.D.Smith
3. Championship Stewards:
K.Messer. R. Knight. I.Sowman.

1.3: COMPETITOR ELIGIBILITY:

1. 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 Licences.
2. 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.)
3. All necessary documentation must be presented for checking at all rounds when signing-on.

1.4: REGISTRATION:

1. 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.
2. The Registration Fee is £130 payable to the 750 Motor Club upon registration.
3. Registrations will be accepted from 1st January 2014 until the closing date for the last round of the championship.
4. Registration numbers will be the permanent Competition number for the Championship.
5. 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 **Formula Vee CHAMPIONSHIP** will be contested over the following rounds:

Date	Circuit	Round/s
26 th / 27 th April	Brands Hatch	2
26 th May	Snetterton 200	2
14 th June	Castle Combe	2
26 th / 27 th July	Anglesey	2
23 rd / 24 th August	Silverstone	2
13 th / 14 th Sept	Cadwell Park	2
4 th / 5 th October	Donington	2

1.6: SCORING:

All drivers will compete for the Formula Vee Championship, with Awards as per 1.7 below. Additionally, drivers of cars which comply with the additional requirements regarding suspension and ignition systems as detailed in those sections of these regulations are eligible to register for Class B. Those drivers will score points in the Formula Vee Championship and in Class B, with awards as per 1.7 below.

1. 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 non-finish - 1. Fastest lap per race - 1 point.

Drivers in class B will also score points of: 25, 22, 20, 18, 16, 14, 12, 11, 10, 9, 8, 7, 6, 5, 4, 3. All other finishers 2 points; non-finishers 1 point. Fastest lap 1 point.

2. 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.
3. 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.

1.7: AWARDS:

1. All awards are to be provided by the Organising Club unless agreed otherwise.
2. Per Round: Trophies to 1st, 2nd and 3rd in each class.
3. Championship: Subject to a minimum of 5 race starts, trophies to:- 1st, 2nd, 3rd, 4th, 5th & 6th overall in each class.
Highest placed novice driver (one who has not held an MSA Race Licence prior to the current season).
Highest number of pole positions.
Highest number of fastest laps.
Best prepared car.
4. Bonuses:
Per Round: not applicable. Championship: not applicable.
5. Presentations: Garlands and Trophies are to be provided for presentation at the end of each race
6. Entertainment Tax Liability. Not applicable.
7. 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 Co-ordinator, 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 irrespective of class. 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



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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 should 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 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 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.

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. The grid for the heat will be filled by the slowest drivers from practice/s, the remainder forming the front part of the grid for the final. Spaces on the back of the grid for the final will be filled by the top classified finishers in the Heat. If there are two practice sessions and the track conditions for them 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.

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 or class 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:

4.1: INFRINGEMENT OF TECHNICAL REGULATIONS:

1. Arising from post-practice scrutineering or judicial action: Should a vehicle be found ineligible, the Clerk of Course will impose the penalty set out in MSA Regulation C3.3.
2. Arising from post-race scrutineering or judicial action: Should a vehicle be found ineligible, 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. Technical infringements may be referred to the Championship Stewards for further action/penalties.

4.2: INFRINGEMENT OF NON-TECHNICAL MSA REGULATIONS and the Sporting Regulations issued for the Championship:

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 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 Q12.6.
4. Any Competitor who is penalised under the Championship Sporting Regulations at any stage of a Championship event and receives an allocation of penalty points on their race licence 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 competitor's qualifying time, starting from the pitlane etc) or the offence occurs at the final meeting of the season, a time penalty of 5 seconds will be added to the elapsed race time of the competitor.
5. Additional specific Championship penalties as per 3.15 of these regulations.

4: CHAMPIONSHIP RACE PENALTIES:

4.1: INFRINGEMENT OF TECHNICAL REGULATIONS:

1. Arising from post-practice scrutineering or judicial action: Should a vehicle be found ineligible, the Clerk of Course will impose the penalty set out in MSA Regulation C3.3.
2. Arising from post-race scrutineering or judicial action: Should a vehicle be found ineligible, 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. Technical infringements may be referred to the Championship Stewards for further action/penalties.

4.2: INFRINGEMENT OF NON-TECHNICAL MSA REGULATIONS and the Sporting Regulations issued for the Championship:

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 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 Q12.6.
4. Any Competitor who is penalised under the Championship Sporting Regulations at any stage of a Championship event and receives an allocation of penalty points on their race licence 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.



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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 **FORMULA VEE Championship** is for Competitors participating in single seater racing cars based upon original Volkswagen components of VW Type 1. Commercially available parts not originating from VW but being the same in all the critical dimensions and materials may also be used. All components may be modified by machining or by the removal of material except where expressly prohibited. All fasteners are unrestricted.

5.3: SAFETY REQUIREMENTS:

The following Articles of MSA Section K Safety Criteria Regulations will apply:- K1.6.3, K2.1.3, K2.1.4, K3.1.2, K3, K5 – K14. Extinguishers must comply with MSA regulation K 3.1.2 a). Seat belts must be FIA homologated in accordance with Q19.14.2.

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.

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:

Steel space-frame, Aluminium or steel monocoque. The only carbon-fibre chassis permitted are those which were registered for the 750 Motor Club Formula Vee Championship in 2002 or earlier, or those which have been officially approved by the 750 Motor Club. All such chassis must carry the identification plate issued and affixed to the chassis by the 750 Motor Club. This permission is limited to those original chassis and is not transferable. Cars utilising carbon-fibre chassis must be presented at scrutineering with a Vehicle Log Book issued by the MSA.

5.6: BODYWORK:

1. Modifications Permitted:

- 1. General:** Unrestricted in respect of materials or number of sections.
- 2. Interior:** Minimum cockpit width opening 45cms.
- 3. Exterior:** The bodywork must cover the whole length and width of the engine crankcase. No part of the front bodywork in front of the front edge of the entire front wheels and more than 25cms from the longitudinal centreline of the car may be above the front wheel rim height. Maximum body width in front of front wheels 87cms. Maximum bodywork height with driver normally seated is 90cms from ground level. The roll-over bar is not included in this dimension. Cars built prior to 1976 may exceed this height dimension only if the bodywork is to the original design.
- 4. Silhouette:**
- 5. Ground Clearance:** In accordance with MSA regulation J5.20.11.

2. Modifications Prohibited:

- 1. General:** No part of the body frame or suspension may project beyond a vertical axis in the plane connecting the inside faces of front and rear wheels.

2. Interior:

3. Exterior: No part of the bodywork may project beyond the rearmost part of the gearshift. Apart from normal continuous bodywork, any device whose primary function is to aerodynamically augment the downthrust is prohibited eg nose fins, spoilers, aerofoils and ground effect bodywork. No panel under the car may deviate from the horizontal by more than 25mm and may not extend rearwards beyond the centreline of the rear axle.

4. Silhouette:

5. Ground Clearance:

5.7: ENGINE:

The engine shall be from a Volkswagen Type 1 up to 1300cc, with the following exceptions only:-

1. Modifications Permitted:

VW or VW pattern parts may be modified by the removal of material except where expressly prohibited.

Cylinder Heads: Only VW siamesed port cylinder heads are permitted. Material may be removed. Compression ratio is unrestricted. The inlet port must remain in the uppermost surface of the cylinder head casting. The rocker cover material is free but it must be possible to fit a standard VW rocker cover without removing the inlet manifold.

Valve train: Valve springs, spring caps and shims are unrestricted. Rocker shafts, rocker pillars and rockers must be standard VW or pattern parts. Valves may be replaced with non-standard parts provided they do not exceed the following dimensions:- Maximum Inlet valve head 33.1mm. Maximum Exhaust valve head 30.1mm. Minimum valve stem bearing diameter must not be less than 7.90mm. Any waisted portion under the valve head must not be less than 7.00mm diameter.

Camshaft: Camshaft, cam followers, push rods, push rod tubes, rocker shaft spacers and tappet adjusting screws are unrestricted subject to 5.7.2.

Pistons & Barrels: Any make permitted provided all standard dimensions are complied with. Pistons and barrels may be machined only to alter the compression ratio, to match cylinder head machining or to achieve balance. Piston rings are unrestricted. Maximum bore permitted is 77.6mm.

Crankshaft: A VW 1300/1500/1600 crankshaft must be fitted and the stroke must not exceed 69.1mm. Bearings are unrestricted. The use of counter-weighted crankshafts is not permitted.

Clutch and Flywheel: The clutch must be either 180mm or 200mm diameter as used on VW type 1 or 2 engines. Clutch operation, linings and springs are unrestricted. The clutch cover must be steel, the pressure plate either steel or cast iron and only one friction plate may be used. The flywheel may be lightened and extra location dowels fitted.

Crankcase: A VW type 1, 2 or 3 crankcase must be used. Sump extensions, alterations and baffles are permitted. Dry sump system is optional; oil pump is unrestricted. **Pattern aluminium crankcases are permitted.**

2. Modifications Prohibited:

The addition of material to any VW or VW pattern part is prohibited. High lift rockers are not permitted. Roller type camshaft and cam followers are not permitted. No oil jets positioned to cool the underside of the pistons are permitted.

3. Location:

4. Oil/Water cooling: Any standard VW Type 1 fan is permitted. Fan housing and ducts may be modified or removed. Oil radiators are free as to location and number.

5. Induction Systems: Carburettor and manifold are unrestricted. **A maximum of 2 throttle butterflies/slides only may be used with all of the fuel/air mixture entering the engine via one or more restrictor plates of maximum bore 34mm and minimum depth of 3mm. These restrictor plates must be fitted between each carburettor flange and the induction manifold.** (see below). Inlet port divisions, fuel injection (high or low pressure) and forced induction are prohibited. Additional jets for the injection of fuel upstream or downstream from the carburettor are not permitted. Slide throttles are permitted provided they are totally enclosed. Variable length inlet trumpets are not



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permitted. If a balance pipe is used between induction manifolds it cannot contain any valve or device to manually or automatically open or shut the balance pipe or vary its internal diameter. Automatic fuel adjustment of carburettors by means of a lambda sensor, or thermocouple, is prohibited. In motion manual/ electronic external adjustment of jets or air/fuel mixture is prohibited. The air/fuel mixture can only be adjusted by carburettor butterflies/slides. Electronic controlled adjustment of air/fuel mixture is strictly prohibited.

CARBURETTOR RESTRICTOR PLATES: The only permissible restrictor plates are those supplied by the 750 Motor Club Ltd to registered competitors. The 750 Motor Club Ltd reserves the right to demand at any reasonable time the removal of the restrictors for inspection. Replacement restrictors will be issued to the competitors.

6. Exhaust systems: Must comply with MSA regulations J5.16.5 & J17.

7. Ignition systems:

Dual ignition is prohibited. A standard type Bosch distributor of the 009 design type with only mechanical centrifugal advance activated from within the distributor is allowed. Switching of the low tension current must take place by means of a set of contact breaker points and condenser or by a points replacement kit manufactured by Lumenition part no MTK 001 or a Pertronix 1847A. No interruption of the wiring from the distributor to the coil is permitted. Electronic mappable systems are not permitted.

8. Fuel delivery systems: Fuel lines must be either metal braided or standard VW black flexible pipe. Fuel pumps are free.

5.8: SUSPENSIONS:

FRONT: Torsion bar suspension is mandatory. The following VW Type 1 components must be used - Stub Axles, hubs, front axle beam including two horizontal tubes complete with any interconnection, and torsion arms.

1. Permitted modifications: The outside interconnections may be cut down and trimmed but must remain four sided and rectangular in section; minimum width 35mm, minimum depth 52mm. Cut outs are permitted to allow for track rods. The maximum permitted width of the front axle tube/s, measured at the outside faces, is 87cm. The construction and attachment of the front suspension is otherwise unrestricted. Torsion bars must be standard VW Beetle items; the number of leaves used is free. Any front bump stop must not contact its reaction point until the lowest part of the chassis forward of the steering wheel is within 20mm of the ground. This is to be measured when the car is on flat ground with tyres at their correct pressure and the front of the car is forced towards the ground.

REAR: The following VW Type 1 components must be used - hubs, halfshafts, axle tubes and bearing housings.

2. Prohibited modifications:

FRONT: Coil spring or any other dual system is prohibited.

REAR: The use of the VW double-jointed rear axle or parts thereof is prohibited.

3. Wheelbase/track: Rear track must not exceed 139cms when the wheels are set vertically.

Class B:

1. Permitted modifications:

FRONT: Torsion bar suspension is mandatory. The following VW Type 1 components must be used - Stub Axles, hubs, front axle beam including two horizontal tubes complete with any interconnection, and torsion arms. The outside interconnections may be cut down and trimmed but must remain four sided and rectangular in section with a minimum width of 35mm and minimum depth 52mm. Cut outs are permitted to allow for track rods. The maximum permitted width of the front axle tube/s, measured at the outside faces, is 87cm. Torsion bars must be standard VW Beetle items; the number of leaves used is free. Any front bump stop must not contact its reaction point until the lowest part of the chassis forward of the steering wheel is within 20mm of the ground. This is to be measured when the car is on flat ground with tyres at their correct pressure and the front of the car is forced towards

the ground. The front suspension may use a maximum of two dampers. On each side of the car, one end of the front damper must be attached directly without any links, extensions, push rods or other intermediaries to the front lower trailing arm; the other end of the damper must be attached directly to the chassis or the top beam tube via a bracket or the original VW damper mounting. Only dampers constructed of steel (including the mounting eyes) with internal reservoirs may be used and if adjustable, only have a single adjuster.

REAR: The following VW Type 1 components must be used - hubs, halfshafts, axle tubes and bearing housings.

The rear suspension may use a maximum of two coil spring/dampers. On each side of the car, one end of the rear damper must be attached directly without any links, extensions, push rods or other intermediaries to the wheel end of the axle tube or trailing arm; the other end of the damper must be attached directly to a bracket on the chassis. As an alternative, there may be one spring/damper unit mounted on the chassis, each end of which is connected by pushrods to either end of the wheel end of the axle tube or trailing arm. Only dampers constructed of steel (including the mounting eyes) with internal reservoirs may be used and if adjustable, only have a single adjuster.

2. Prohibited modifications:

FRONT: Coil spring or any other dual system is prohibited.

REAR: The use of the VW double-jointed rear axle or parts thereof is prohibited.

3. Wheelbase/track: Rear track must not exceed 139cms when the wheels are set vertically.

5.9: TRANSMISSIONS:

A system of gear ratio validation is applied which uses the recognised MSA Scrutineers' seal. A hole must be drilled at the gearbox-casing 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. A breather must be fitted to the gearbox housing, feeding to a catch tank of minimum capacity 100ml; as an alternative the engine catch tank may be used for this purpose provided it has a minimum capacity of 2.1 litres.

1. Permitted modifications: Full syncromesh VW Type 1 gearbox must be used. It must contain an operable reverse gear and four forward gears capable of being engaged by the driver whilst normally seated. The transmission must be mounted in the chassis behind the engine. The crown wheel may be transposed to provide the required direction of shaft rotation. The use of a sandwich plate between the engine and the gearbox (or any other method of mounting engine to gearbox) is permitted provided the additional increase in the distance between the engine and gearbox does not exceed 25.4 millimetres.

2. Prohibited modifications: Removal of the syncromesh units from the gearbox is prohibited. The gearbox may not be fitted inverted. Locking or limited slip differentials are prohibited. The use of any VW Transporter gears is prohibited. Traction control is prohibited. The use of any device to detect the rotational aspect, including speed, of either or both of the rear wheel(s) is strictly prohibited. **Any form of sequential gear change or steering wheel mounted paddle shift is prohibited.**

3. Transmissions & Drive ratios: Only the following VW gearbox ratios are permitted:-

	1961-1966	1966 Type 1 1200 & 1300	Type 1 - 1500 Type 3
1 st	16.625:1 or 15.675:1	16.625:1 or 15.675:1	16.625:1 or 15.675:1
2 nd	9.005:1 or 8.492:1	9.005:1 or 8.492:1	9.005:1 or 8.492:1
3 rd	5.767:1 or 5.437:1	5.516:1 or 5.200:1	5.516:1 or 5.200:1
4 th	3.885:1 or 3.666:1	*3.885:1 or 3.666:1	3.885:1 or 3.666:1
Diff	8-35 or 8-33	8-35 or 8-33	8-35 or 8-33

* The later ratio of 3.865:1 is permitted. ALL TRANSPORTER GEARS ARE PROHIBITED



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 K5.
3. **Batteries:** An electric starter operable from the driver's seat is mandatory and must be capable of repetitive starts. The battery is unrestricted.
4. **Generators:** A charging system is optional.

5.11: BRAKES

The braking system must be only VW Type 1 drums or discs on the front and drums on the rear. Standard parts must be used.

1. **Permitted Modifications:** Spacers may be utilised to enable standard VW Type 1 disc brake calipers to be fitted to front drum brake stub axles. Brake linings, brake master cylinders, brake lines, pedals and operating linkages are unrestricted. The friction faces of the disc may be reclaimed by simple machining maintaining a minimum disc thickness of 8.00 mm. Data logging sensors/speed sensors may only be attached by being glued to the non-friction area of the disc/bell.
2. **Prohibited Modifications:** Any that contravenes the above permitted modifications. Machining of or drilling holes in the brake drums is prohibited. Fitting of disc brakes to the rear axle is prohibited. The use of discs which are grooved, cross-drilled, radially drilled or modified in any other way is not permitted, except for the machining of the friction faces as specified in 5.11.1. No modification may be made to the non-friction area of the disc/bell.

5.12: WHEELS / STEERING

1. **Permitted Options:** Steering system is unrestricted.
2. **Prohibited Options:** None.
3. **Construction & Materials:** Make of wheel is unrestricted. Magnesium wheels are prohibited.
4. **Dimensions:** Wheels must be 15ins diameter and maximum 6ins width.

5.13: TYRES

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

1. **Specifications:** The only tyres permitted are those produced by Dunlop for Formula Vee. Minimum tread depth of 1.0mm is to be maintained around the circumference of at least two of the grooves in the tyre tread with the 3rd groove still visible. Measurement to be taken prior to the start of any race or practice session.

Tyres fitted to the front wheels must be:

120/590-15 CR82 434

Tyres fitted to the rear wheels must be:

135/620-15 CR82 434

2. **Nominated Manufacturers:** Dunlop.

5.14: VEHICLE WEIGHT:

Minimum vehicle weight is **380 Kgs** (834 lbs). Minimum weight of car and driver is **470 Kgs** (1036 lbs). No allowance will be made for the topping up of fluids. The 750 Motor Club reserves the right to change the minimum weight of any carbon-fibre chassis after rounds 4 & 8, giving 21 days' notice. Any ballast added to the vehicle in order to achieve the minimum weight must be within the overall periphery of, and be securely bolted to, the chassis.

5.15: FUEL TANK / FUEL

1. **Types:** F.I.A homologated safety tanks are mandatory if fitted outside the chassis frame. Tanks within the chassis frame must be covered externally with a fireproof coating. A non-return valve must be incorporated in the vent system.
2. **Locations:** Inside or outside the chassis frame subject to the above.
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. Class B cars must display a "B" decal in a prominent place next to their race number.
2. **Suppliers:** Sponsors and Club decals will be available at the first championship race in which the vehicle is entered.

6. APPENDICES:

Car suppliers and hirers:

Dominator - Alan Harding, AHS (Mechanical) Ltd, Tel. 01455-553052/ 07989 414471. alan@formulavee.co.uk

GAC - Alan Woodward/Graham Card. Tel 01296 613222 (www.vvracing.net). alan@vvracing.net

Leystone - Paul Heavey, Leystone Racing, Kilmeague, Naas, Co. Kildare, Ireland Tel. 00353 (0)45 860658.

Scarab - Andy Storer, Tel. 01636 822033 / 07970 632874.

Sheane - Peter Andrews, Centurion Motorsport Tel. 0121 373 4426/
07904102348. [Email centurionmotorsport@hotmail.co.uk](mailto:centurionmotorsport@hotmail.co.uk) [web www.centurionmotorsport.com](http://www.centurionmotorsport.com)
Storm – Steve Glasswell - 07500 836492; Stephen@sgmachining.co.uk
Race Car Hire & Repairs : Phill Foster, Bears Motorsport Tel. 0121 742 2200/
07976 715812. info@bearsmotorsport.co.uk
Osport,Storm: Formula Vee Team,Race Car Hire,Preperation and Driver Coaching.
www.teamosport.com Tony :07920 425820 Jake 07917 166333