

DRAFT 2005 TVR CC CHALLENGE CUP SERIES

0. PREAMBLE

1. SPORTING REGULATIONS - GENERAL

1.1 Title & Jurisdiction:

The 2005 TVR CC CHALLENGE CUP SERIES is organised and administered by the BARC in accordance with the General Series Prescriptions of the Royal Automobile Club Motor Sports Association (MSA) and these Series Regulations.

MSA Series Permit No: N / A

Race Status: National B

MSA Series Grade: N / A

1.2 Officials:

1.2.1	Co-ordinator:	Claire Nixon	BARC
1.2.2.	Drivers Rep:		
1.2.3	Licenced Eligibility Scrutineer:	Neil White	BARC
1.2.4	Stewards:	Dale Wells Rick Smith John Ward	BARC BARC BRSCC

1.3 Competitor Eligibility:

- 1.3.1 Entrants where applicable must be in possession of a valid 2005 MSA Entrants Licence.
- 1.3.2 Drivers and Entrant/Drivers must be fully paid up valid racing membership card holding members of the TVRCC and the BARC, be Registered for the series and be in possession of valid MSA Competition (Racing) National B Licence minimum.
- 1.3.3 All necessary documentation must be presented for checking at all rounds when signing-on.

1.4 Registration:

- 1.4.1 All drivers must register as competitors for the series by returning the Registration Form to the Co-ordinator prior to the Final Closing date for the first round being entered.
- 1.4.2 The Registration fee is £150. Registration Fee is payable to "TVR Car Club" and should be sent directly to Julia Bowes, Ashford, 3 Batts Farmyard, Wilton, Marlborough, Wiltshire, SN8 3SS. No registration fee applies to Invitation Class competitors entering fewer than four races in the season. The full registration fee will be payable at the time of entry for an invitation class competitors fourth race of the season.
- 1.4.3 Registrations will be accepted from 1st December 2004 until further notice.
- 1.4.4 Registration numbers will be the permanent Competition numbers for the Series. Each registered driver will be allocated a permanent number for the season by the Series Co-ordinator and these will be issued strictly on receipt of a fully completed registration form and any registration fee.
- 1.4.5 Official Series Registration Cards will be issued by the BARC only on receipt of the attached Registration Form.
- 1.4.6 **When registering for this Series, competitors must take account of the Class Structure defined at the beginning of Section 5 (Technical Regulations) and register accordingly. Once registered,**

competitors who wish to change their class will only be permitted to do this once in each calendar year.

1.5 Series Races:

The 2005 TVR CC CHALLENGE CUP SERIES will consist of 11 stand alone races as follows:

Date:	Circuit	Organising Club/Centre
--------------	----------------	-------------------------------

1.5.1 In accordance with MSA regulation B.8.4 the organisers reserve the right to amend the published list of dates and rounds, in which case, all registered competitors will be informed of the amendments by Official Bulletins posted to the address specified on the Official Registration Form.

1.6 **Points:** Not Applicable

1.7 Awards:

1.7.1 All awards are to be provided by the BARC

1.7.2 Per Round: Garland and Trophy to the Race Winner and a Trophy to each other Class Winner

1.7.3 Series: Not Applicable

1.7.4 Bonuses: None

1.7.5 Presentations: Not Applicable

1.7.6 Entertainment Tax Liability. Not Applicable.

1.7.7 Title to all Trophies:
In the event of any Provisional Results or Series Tables being revised after any provisional presentations and such revisions affect the distribution of any awards the Competitors concerned must return such awards to the BARC in good condition within 7 days.

2. SPORTING REGULATIONS - JUDICIAL PROCEDURES

2.1 **Rounds:** In accordance with Section O of the 2005 MSA Yearbook and these Regulations.

2.2 **Series:** In accordance with Section O of the 2005MSA Yearbook and these Regulations.

3. SPORTING REGULATIONS - SERIES RACE MEETINGS & RACE PROCEDURES

3.1 Entries:

- 3.1.1 Competitors are responsible for sending in correct and complete entries with the correct entry fees prior to the entry closing dates which shall be 20 days before each round.
- 3.1.2 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.
- 3.1.3 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 publication of Entry Lists with Final Instructions the Competitor concerned must apply for approval of acceptance by the Stewards of the Meeting **BEFORE** signing-on.
- 3.1.4 The Maximum Entry Fee for each round shall be: As detailed in the SR's for the event in question..
- 3.1.5 There is no provision for Qualification Races to be run in this Series.
- 3.1.6 Reserves are to be nominated on the Final List of Entries published with Final Instructions or Amendment Sheet Bulletins, All Reserves will practice and replace withdrawn or retired entries 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 given places after publication of the grid sheet and prior to cars being collected in Official "Assembly Areas" 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 the Course.

3.2 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.

3.3 Practice:

- 3.3.1 The minimum period of practice to be provided for a one race event is to be as specified in the MSA Regulations in respect of the circuit lengths.
- 3.3.2 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 series criteria and the decision of the Clerk of the Course shall be final.
- 3.3.3 For races marked (**) in section 1.5., where it is planned to hold two races, each race shall have a separate qualifying session as per 3.3.1. above. However, the constraints of individual event timetables may not allow for two qualifying sessions in which case one session will be scheduled. Where this is the case, the result of the first race will set the grid for the second race. Competitors will be informed which of these options is to be used by way of Supplementary Regulations / Final Instructions.

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 the MSA Regulation J.4.4. The Clerk of the Course and/or Stewards of the Meeting shall have the right to exclude any driver whose practice times or driving are considered to be unsatisfactory - as per MSA Regulation J.4.4.3.

3.5 Races:

The standard minimum scheduled distance shall be 12 miles whenever practicable 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 full points scoring round.

3.6 Starts:

3.6.1 All race start countdowns are to have a minimum elapsed period of 5 minutes from the time all cars are released to form up on the grid to the start of the Green flag Lap(s) in the formation as specified on the Track Licence for each circuit.

3.6.2 The Countdown procedures/audible warnings sequence shall be:

Standing Starts:-

3 minutes to start of Green Flag/Pace Lap - Close Pitlane Exit.

2 minutes to start of Green Flag/Pace Lap - Clear Grid Warning/Grid Closed.

2 minute to start of Green Flag/Pace lap - Start engines/Clear Grid.

30 seconds - Visible and audible warning for start of Green Flag/Pace Lap.

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

3.6.4 Any cars removed from the grid after the 3 minute stage or driven into pits on Green Flag lap 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 pitlane exit. whichever is the later.

3.6.5 Any drivers unable to start the Green Flag/Pace lap or start are required to indicate their situation as per MSA Regulation J 13.10.2 and any drivers 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.

3.6.6 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.

3.6.7 A five second board will be used to indicate that the grid is complete. The red lights will be switched on five seconds after the board is withdrawn.

In the event of any starting lights failure the Starter will revert to the use of the Union Jack.

3.7 Race Stops:

3.7.1 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 starting grid area which will automatically become a Parc Ferme area.

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.

3.7.2 Case A - Less than two laps completed by Race Leader:

The race will be null and void. The race will restart from the original grid positions. Competitors unable to take the restart may be replaced by reserves who will start from the back of the grid in reserve order. Gaps on the grid should not be closed up. The length of the restarted race will be determined by the Clerk of the Course.

3.7.3 Case B - More than two laps completed by Race Leader but less than 50% of race distance completed:

The race will restart from a grid set out in the finishing order of part one. The result of the race will be the finishing order at the end of part two. The result will not be aggregated. The length of the restarted race will be determined by the Clerk of the Course.

3.7.4 If the leader has completed more than 50% of the race distance or duration it shall not be re-started and the results will be declared in accordance with MSA Regulation J.5.4.4.

3.8 Re-Scrutiny:

All vehicle 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 & Pitlane Safety:

- 3.9.1 Pits: Entrants must ensure that the MSA, Circuit Management and Organising Club Safety Regulations are complied with at all times.
- 3.9.2 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 pitlanes.
- 3.9.3 Refuelling: May only be carried out in accordance with the MSA J.14 Regulations, Circuit Management Regulations and the SR's 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 Pit Lane Entrance/Paddock Entrance as instructed, comply with any directions given by marshals or Officials and to keep the helmets on and harnesses done up while on the circuit or in the pitlane.

3.11 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.

3.12 Timing Modules:

- 3.12.1 All competitors will be required to fit Electronic Self Identification Modules to their cars for the purposes of accurate timing. Holders for these and detailed fitting instructions will be issued with the transponders and it will be the responsibility of the competitor to fit these in the car in the position and manner specified. The Modules must be in place and functioning correctly for all Championship qualifying practice sessions and races. The setting and servicing of these items must only be carried out by properly authorised MSA licensed Timekeepers. Competitors will be charged by the timing company for replacement of the Modules due to misuse or loss at any time during the season.
- 3.12.2 Competitors may not place electronic timing equipment within five metres of the official Start, Finish or any other official timing lines at any event or test session/day. Any such equipment placed within these zones will be removed.

4. SERIES RACE PENALTIES:

4.1 Infringements of Technical Regulations:

4.1.1 Arising from post practice Scrutineering or Judicial Action:
Minimum Penalty: The provisions of MSA Regulations: O.3.3

4.1.2 Arising from post race Scrutineering or Judicial Action:
Minimum Penalty: The provisions of MSA Regulations: O.3.5.1. (a) and (b).

For infringements deemed to be of a more serious nature the Clerk of the Course and/or Stewards of the Meeting are to invoke the provisions of Regulation O.3.5.1. (c)

4.1.3 Additional specific series penalties: At the discretion of the Series Stewards.

4.1.4 Any competitor found guilty of contravening these Regulations (Sporting or Technical) may be reported to the Stewards of the Series for possible imposition of further penalties which may include total exclusion from the Series

4.2 Infringements of non-technical MSA Regulations and the Sporting Regulations issued for the Series:

As per 2005 MSA Judicial Procedure Regulations.

2005 TVR CC CHALLENGE CUP SERIES

5. TECHNICAL

5.1 Introduction:

- 5.1.1 The following technical regulations are set out in accordance with MSA specified format and it should be clearly understood that if the following texts do not clearly state that you can do it, you should adopt the principal that you cannot. The word 'standard' used within these Technical Regulations as a description of components is to be interpreted as: 'The specified component from the factory or the manufacturers parts list for the model / engine shown on the entry form or registration form. No modifications are permitted beyond the repair or adjustment processes specified by the factory or the manufacturer. Checking will be by comparison to spare parts supplied by the manufacturers official agent'.
- 5.1.2 Any component sealed by MSA official must remain sealed.
- 5.1.3 If a seal has to be broken for repair or replacement, the Eligibility Scrutineer or Coordinator must be notified and re-sealing will take place after checks are made at the next race meeting.

5.2 General Description and Requirements:

- 5.2.1.1 The Series is for Competitors participating in a multi class race, for cars produced by TVR Limited Blackpool and which comply with the Technical Regulations.
- 5.2.1.2 Eligible Vehicles are any as produced by the TVR factory, and are detailed in Appendix 6.2. Vehicles not included in this list may be considered at the discretion of the organisers - see 5.2.1.3.

Model series relates to the family of variants of a model (For example, S Series relates to all variants between S1 and V8S, Tasmin Series relates to all variants between Tasmin 280 and 450 SEAC – NOT race SEAC). Body, chassis and engine block for each vehicle must all remain within one model series. For example, a Tasmin body on a 450 SEAC chassis with a Ford Pinto block is eligible. A Vixen body on a Griffith chassis with a Speed Six engine block is NOT eligible. A complete list of Model Series is attached in appendix 6.2

Tuscan Challenge race cars are also eligible subject to restrictions outlined in 5.2.2.1.

- 5.2.1.3 Applications may be made (in writing) using the Series Registration form to the Organisers for a cars inclusion and this may be declined should the car proposed be out of keeping with the TVR model list. The Organisers decision to accept or to decline a cars' application for inclusion will be final.
- 5.2.1.4 The entrants of all accepted cars must complete (in conjunction with the Eligibility Scrutineer) and be in possession of the official Series Vehicle Specification Sheet drawn up for each competing car, and which has been submitted to and verified and approved by the Organisers.
The Specification Sheet will be issued for completion to all Competitors following receipt by the Organisers of their initial Registration Form and final acceptance of the registration will be conditional on Competitors returning the Vehicle Specification Sheet fully completed, this will be authorised by the Eligibility Scrutineer. The Organisers may verify the information in the Vehicle Specification Sheet by any or all of the following means: - Homologation Forms, official workshop manuals, model registrar, the factory itself or by examination of similar vehicles or components for the appropriate model.
- 5.2.1.5 The Vehicle Specification Sheet must be presented with the car at scrutineering or whenever required by the Organisers.

5.2.2 Class Structure:

Class A : Up to 150 DL1 Units per 1000 kg with a maximum absolute power of 230 DL1 Units.
Class B : Up to 220 DL1 Units per 1000 kg with a maximum absolute power of 300 DL1 Units.
Invitation Class: Competitors invited to join the series by the organisers who do not wish to compete in Class A or B. Invitation Class Cars are not subject to mandatory fitment of a DL1 datalogger for the whole

season, although a measurement may occasionally be made to gain realistic power output figures for comparison purposes.

Note: 1 DL1 Unit equates to approximately 1 horsepower measured at the wheels.

To equate performance, cars in the Invitation Class may be subject to weight penalties. The requirement to meet a minimum weight (inclusive of driver) may be applied at any time throughout the season, including at the time of registration. Minimum weights may be revised up or down at any time throughout the season. All competitors are reminded of MSA Regulation J.4.4.3.

Competitors may change from Class A to Class B once in each championship season. Having changed, no change back to Class A will be permitted.

Competitors may change from Class B to Class A once in each championship season. Having changed, no change back to Class B will be permitted.

Competitors may change from Class A or B to the Invitation Class as often as required, provided they return to the same class.

5.2.2.1 Tuscan Challenge Race Cars:

Ex Tuscan Challenge race cars fitted with AJP V8 engines are only eligible in Class A or Class B. Ex Tuscan Challenge race cars fitted with engines other than race built AJP V8 are also eligible for the Invitation Class.

5.2.3 Power Output Measurement:

All power figures above refer to DL1 horsepower measured as the power propelling the car (i.e. effectively at the roadwheels)

Power will be measured using a Race Technology DL1 datalogger. Each competitor is required to supply and install their own datalogger. The organisers will not provide dataloggers. The figures obtained will be used to ensure compliance during each qualifying and race session. Competitors should be aware that it is their entire responsibility to ensure that the vehicle complies with the relevant power to weight ratio at all times. For the purposes of eligibility, checks will be made by the eligibility scrutineer and figures obtained by mandatory datalogging equipment fitted at the competitors expense. Any variance from the power to weight ratio figures used in the regulations will cause the car to be technically ineligible and penalties will be applied accordingly.

You must ensure that the unit powers up correctly and stays on when cranking the engine. Any vehicle which arrives at a qualifying or race session without a correctly functioning datalogger will be excluded from competition.

A flat, adjustable mounting platform will be required to be fitted, in full view, on the longitudinal centre line of the car within sight from outside the vehicle. The datalogger must be rigidly attached to this platform, and may be sealed by the scrutineer.

The loggers must be started and begin sampling before the vehicle leaves the collection area for Practice or Race. Drivers are responsible for ensuring that their dataloggers are powered and sampling at all times during qualifying and races. Unit failure excepted, no data in the logger will mean no time in qualifying, and/or no result in the race. Drivers will also be responsible for clearing the data from the logger at the start of each meeting.

A separate "Power to Weight" eligibility document will be available from the organisers which outlines the procedure intended to be used for confirming compliance with the power to weight regulations. This document may be subject to change through the championship year, but any changes will be notified to registered competitors. The latest version of this document is attached to these regulations in Appendix 6.3.

5.2.4 Technical Checking:

The Eligibility Scrutineer / Organisers reserve the right to inspect any vehicle at any time; this will be carried out in the scrutineering bay. They also reserve the right within the general regulations of the "MSA" Yearbook to strip or seal any part or parts of a vehicle. The competitor will bear all cost of such an inspection. If the vehicle is found to be outside the regulations for the class entered it will lead to exclusion from the results of that event .

It is the competitor's responsibility to ensure that the vehicle entered complies with the regulations for the series, even if they are not the builder or assembler of the vehicle. Any vehicle found to be in contravention of the regulations will render the competitor and vehicle to be excluded from the series.

5.3 Safety Requirements:

The following Articles of MSA Appendix Q Safety Criteria Regulations will apply:

Q1.5.1 with compulsory diagonal with reference to Q1.5.4 a & b (a 'full' cage as per drawings Q3 or Q4 must be fitted), 2.1.2, 3.1.1, 5, 6, 8 - 14 inclusive.

In short all cars must have MSA approved:

Full roll cage, Race seat, Safety Harness, Fire extinguisher system

Inside and outside operation of Fire Extinguisher system and full electrics cut off

5.4 General Technical Requirements & Exceptions:

All hoses and their associated clips are free. Fasteners (e.g. nuts & bolts) are free.

5.5 Chassis:

Only standard, rebuilt or re-manufactured chassis are permitted. The chassis must remain to the manufacturers' original specification in construction and material. The position of the front bulkhead may not be altered; neither may material be removed from them other than holes for roll cage, control cables, wiring, hoses and fasteners. Additional strengthening is permitted provided that no material is removed in the process.

5.6 Bodywork:

Standard bodywork in terms of material, thickness and shape must be retained

5.6.1 Modifications Permitted

5.6.1.1 General: Bodywork must remain as standard production model left the factory. In the case of damage repair, replacement body sections may be grafted to original shell. These sections must be of original design, size, shape and specification. Replacement body panels may be from any model in the model series. This includes spoilers where supplied as original factory parts only. For example, it is eligible to replace an S1 bonnet with a V8S bonnet. It is not eligible to replace a 3000M bonnet with a V8S bonnet. Temporary repairs must be made structurally and cosmetically good before the next race meeting. Open top cars may use a tonneau cover or original shape removable hardtop.

5.6.1.2 To allow the drivers seat to be lower (within the roll cage) and VERY secure to the chassis, the chassis rails can be repositioned on the drivers' side. The drivers' seat must be changed for a suitable 'racing' seat. All other seats may be removed. Carpets, trim panels and headlining may be removed. Heaters and associated ducting may be removed but any holes in bulkheads must be sealed. Doors must remain operable from inside and out. Window winding mechanisms may be removed but a suitable aperture must be available for the driver for hand signals. External rear view mirrors are free, provided that their surface area is of at least 90cm² , and that a 6cm sided square must be able to be laid on the mirror's surface.

5.6.1.3 Front wiper mechanisms are free. Polycarbonate windows must be used for all windows other than Windscreen which must be laminated or MSA approved Polycarbonate material.

- 5.6.1.4 Exterior: Pop up headlights and motors may be removed but must be replaced by two forward facing high intensity white 'driving' or 'spot' lights in working condition. These may be positioned in any existing aperture or legal MOT position.
- 5.6.1.5 Silhouette: Must be standard. Standard front and rear bumpers must be fitted but may not be reinforced. Hardtops, if fitted, are free within the original silhouette.
- 5.6.1.6 Only those aerodynamic devices which are permanently mounted on the bodywork and which are a production standard are permitted. The Organisers will be the sole arbiters in any dispute concerning the eligibility of aerodynamic devices. Provenance must be supplied if necessary.

Non standard front splitters are allowed but where fitted must be no wider than the vehicle front profile and extend not more than 75mm from the vertical plain of the front valance and must comply with minimum ground clearance 5.6.1.10

- 5.6.1.7 Production openings in the bodywork, e.g. for fog lamps, may be used as air intakes. As long as the production apertures are not modified, it is permitted to fasten ducting behind them.
- 5.6.1.8 The front screen wiper blades may be replaced

Bonnets must be fitted in standard position and must maintain standard silhouette.

Bonnets are not permitted to be lifted.

Permitted modifications: Front edge of liftable bonnet sections can be cut away to maximum 100mm on Griffith only.

Material can be removed from rear edge and sides of the bonnet so long as the overall plan dimensions remain standard.

5.6.1.9 **Ground Clearance:**

Minimum clearance with driver on board is 75mm to lowest point of vehicle, excluding the exhaust system.

5.6.1.10 **Interior**

May be stripped and modified in accordance with MSA regulations

Driving controls and switchgear are free within MSA regulations

5.6.2 **Modifications Prohibited:**

5.6.2.1 General: No bodywork or chassis members may be removed or changed for different materials

5.6.2.2 Exterior: Flared arches or wheel arch extensions are prohibited

5.6.2.3 It is not permitted to fit underbody/under engine protection other than that fitted to the Production Vehicle

5.7 **Engine:**

Eligible engines: Any engine based on a block that was produced as an original fitment by the TVR Factory in any road or race car.

5.7.1 **Location:**

Standard engine position to be retained

5.7.2 **Oil / Water Cooling:**

5.7.3 Radiator cooling system is free.

5.7.4 Oil coolers are permitted but the exterior bodywork and silhouette must not be changed by the installation.

5.7.5 **Induction Systems:**

Induction systems are free, however all air to be used for combustion must pass through an air filter.

5.7.6 **Exhaust System:**

Free but must comply with MSA Regulation E.12.16.6. and E.12.17

5.7.7 **Ignition Systems:**

Ignition systems are free.

5.7.8 **Fuel delivery Systems:**

Fuel delivery systems are free.

5.8 **Suspension:**

5.8.1 **Permitted Modifications:**

5.8.1.1 **Front Suspension**

After market / fabricated upper and / or lower wishbone maintaining the original material and mounting points may be used.

5.8.1.2 **Rear Suspension**

Rear link inner arm INNER PIVOT POINT may be moved outboard up to 50mm maximum on Tasmin model series trailing arm suspension only.

5.8.1.3 **Dampers and mounting points**

One per corner, unless two were fitted as a factory standard as in earlier models. Single adjuster, mounting point free. Position of lower front wishbone damper mount position is free. Position of upper rear damper position is free. Adjustable spring seat. Damper mounting points may be reinforced and may be welded directly to the chassis. Damper bushes may be replaced with rose joints. Diff beams may be strengthened by addition of ferrous material. All suspension arms may be strengthened front and rear, provided the pivot points remain the same and strengthening is within original outer block form. Remote reservoirs and / or remote damping adjustment are not permitted.

5.8.1.4 **General**

Spring rates are free. Front and rear camber is free. Front anti-roll bar and fitment is free. Rear anti roll bar and fitment is free. Remote anti roll bar adjusters are not permitted. Minimum ground clearance as per 5.6.1.10 above.

5.8.2 **Prohibited Modifications:**

Anything other than what is permitted in 5.8.1.

5.8.3 **Wheelbase / Track :**

To remain standard - wheel spacers are not permitted.

5.9 **Transmission:**

Any gearbox as fitted in any production TVR can be used regardless of age. Clutch operation and material is free. Linkage, gears and ratios free.

5.9.1 **Prohibited Modifications:** Paddle, electronic or pneumatic shifts.

5.9.2 Differentials are free but must remain within original mounting points. It will be compulsory for each vehicle to run only one differential ratio configuration during the season. The Eligibility Scrutineer will police

this by a variety of means available, including wire sealing of securing bolts. Holes to be drilled for this purpose as specified in final technical regs.

5.10 Electrical:

5.10.1 Exterior Lighting:

Two forward facing white lights must be used. The position of these only to be in places where lights were originally sited. Two rear facing functioning red brake lights must be fitted and these are to use original lenses, although mounting cluster may be removed.

5.10.2 Rear Fog Light

Fitted centrally on rear. Must be fitted to MSA Regulation Q.5.

5.10.3 Battery:

A battery and electric starter motor must be fitted and capable of repetitive starts. Battery is free as is location within MSA Regulations.

Adhere to E12.4.1, E12.14.2, E12.14.5

5.10.4 **Charging System:** A charging system, alternator (type and drive are free) must be fitted and working.

5.11 Brakes:

Brakes are free.

Owing to the variety of brakes currently fitted, brake modifications will have a direct effect on weight. Modifications from standard are permitted subject to the following weight penalties. These weight penalties are additional to the minimum weight per car determined by power to weight regulations.

- a) Original calliper and disk no larger than 273mm - No penalty
- b) Any calliper other than that fitted as standard by the factory +50KG
- c) Any disk larger than 273mm (factory standard or not) 50kg +1kg per 1mm over 273mm
- d) Both disk and calliper other than a) 50kg +1kg per 1mm over 273mm

N.B. See weight class category

Handbrake to be operational.

Master cylinder free, Pedal box free.

5.11.1 Prohibited Modifications:

ABS. No in-car, driver adjustable bias adjustment.

5.11.2 Permitted Modifications: With NO weight penalty

Callipers may be changed to Ford Granada vented disc callipers on TVR TASMIN CARS ONLY

5.11.3 Brake pipes are free.

5.12 Wheels and Steering:

5.12.1 Permitted Options:

All steering and suspension bushes are free and may be changed for bearings, provided the original pivot point is maintained.

Power steering is permitted. Steering wheel is free subject to MSA Regulations.

Rack, position and mounting is free. Steering column and position are free.

STEERING LOCK: If fitted with a steering lock, this should be rendered inoperative, unless the vehicle is driven to the circuit on the highway. (MSA Regulation J.20.6.)

5.12.2 **Wheels:** Advised Series wheel: Compomotive MO range
Or Standard TVR supplied wheel for particular model

5.13 Tyres:

Any tyre from MSA List 1A or List 1B is permitted (MSA Regulations R.3.1.1,R.3.1.2)

Maximum marked section width 255mm

Minimum marked aspect ratio 35

Maximum marked rim diameter 18inch

No alteration to any of the tyres from the manufacturers' specification is permitted. Re-cutting, re-grooving or in any other way modifying the tread pattern is not permitted. All the manufacturers' data must be clearly visible. Buffing of sidewalls to remove data is prohibited. Tyres must be to MOT requirements in every respect. Remoulds are not permitted.

5.14 Weights:

The minimum weight including driver will be 1000kg for the duration of the race meeting up to and including post event scrutineering.

Vehicles produced as standard with an unladen weight of less than 1,000kg must run as a minimum at the proven original weight but including driver.

Invitation Class cars may be required to carry ballast.

Weight can only be added by use of lead securely bolted in the car.

5.15 Fuel Tank / Fuel:

5.15.1 Tank Type:

All fuel tank fitting must adhere to MSA fire safety regulations and Q6

5.15.2 Fuel:

Only pump fuel as defined in Section P of the MSA Blue Book may be used.

5.16 Silencing: To current MSA Regulations E.12.16.6. and E.12.17.

5.17 Numbers and Series Decals:

5.17.1 Positions:

Race numbers must be displayed on each side of the vehicle (in-front of, or on doors) and straight on the bonnet, when stood in front of the car.

5.17.2 Advertising:

Sponsorship on cars is permitted. However, no graphics are permitted on transparent surfaces other than drivers names.

5.17.3 Suppliers:

Where TVRCC Challenge Cup flags are supplied to race teams, it will be mandatory for flags to be flown at each round.

Sponsors decals will be available at the first event for which the car is entered.

All cars must carry:

Sponsor branding where indicated by the organisers.

Race suits must have the supplied Sponsor embroidered badges and sponsor hats must be worn on the winners' podium.

Preferred colour for Series race suit is Black with red trim.

Positioning of 'Series' decals must be uniform throughout all cars.

An example for positioning will be provided before the first race.

Failure to have car and driver in 'branded' form may result in exclusion.

5.18 Scrutineering:

5.18.1 Checking: The Series Eligibility Scrutineer / Organisers reserve the right to inspect any vehicle at any time. They subsequently reserve the right to strip or seal any part or parts of any vehicle. The competitor concerned will bear the cost of any such inspection and subsequent rebuild. In accordance with MSA Judicial / Technical Procedures, if the vehicle is found to be outside the regulations for the class entered, it may be excluded from the results of that event.

5.18.2 Compliance: It is the responsibility of the competitor concerned to ensure that the vehicle entered complies with the regulations of both the series and the class in question, even if the competitor is not the builder, assembler or preparer of the vehicle. Any vehicle found to be in contravention of compliance will render the competitor concerned liable to exclusion.

6. APPENDICES:

6.1 Race Organising Clubs and Contacts:

BARC, Thruxton Circuit, Andover, Hampshire SP11 8PN
 Tel: 01264 882200 Fax: 01264 882233
 E-mail: competitions@barc.net

Eligibility Scrutineer:

6.2 Permitted TVR Models

Model Series	Model
Grantura	Any Grantura
Vixen	Any Vixen
Tuscan	Any 1960s/1970s Tuscan
Griffith	Any 1960s/1970s Griffith
M	2500M 1600M 3000M Taimar 3000S Taimar Turbo
Tasmin	Tasmin S1 Tasmin S2 Tasmin 280i Tasmin 200 Tasmin 350 350 350 SE 390 SE 400 SE 420 SE 450 SE 420 SEAC 450 SEAC
S	S1 S2 S3 V8S
Tuscan Race Car	Tuscan Race Car
Griffith	Griffith 4.0 Griffith 4.3 Griffith 4.3 BV Griffith 500
Chimaera	Chimaera 400 Chimaera 450 Chimaera 500
Cerbera	Cerbera 4.2 Cerbera 4.5 Cerbera Speed Six
Tuscan	Tuscan Tuscan S
Tamora	Tamora
T350	T350 T T350 C

6.3 Establishing Power to Weight Eligibility

1 Principles

- 1.1.1 Each competitors power to weight figures are to be policed by using a mandatory DL1 datalogger in each car and venue car weighing scales.
- 1.1.2 Each competitor will declare a 'Standard' power figure, which will be assumed to be constant from race to race unless a revised figure is declared.
- 1.1.3 Specific 'Standard' minimum weight limits will be set for each competitor. Throughout the season, eligibility will be established by comparing actual weight to 'Standard' weight.
- 1.1.4 'Standard' minimum weight is to be calculated using the relevant class power to weight limit and the competitors 'Standard' power figure, and will include any additional weight penalties required by the regulations.
- 1.1.5 Data from the DL1 datalogger will be used to verify that recorded power does not exceed 'Standard' power.
- 1.1.6 It is the competitors responsibility to ensure that they do not exceed the 'Standard' power figure.
- 1.1.7 It is the competitors responsibility to ensure that their car and driver does not weigh less than the 'Standard' minimum weight.
- 1.1.8 Measured power and weight figures for all cars will be issued with the series points after each race.

2 Standard power measurement procedure

- 2.1.1 Use the standard Data Analysis software application from Race Technology
- 2.1.2 Load data and correct settings for the vehicle to be evaluated.
- 2.1.3 Ensure that the ambient settings are correct:-
- 2.1.4 Ensure that power settings are correct:-
- 2.1.5 Power Correction standard:- SAE 99 kPa, 25 C (85% ME Assumed)
- 2.1.6 Power HP Units :- Metric HP (PS) (735.5W)
- 2.1.7 Select the track map option.
- 2.1.8 Add a track marker at approximate position of the start finish line.
- 2.1.9 Select the "measurements" option.

2.1.10 Add a new measurement.

2.1.11 Set the measurement to “95% Max of” “Power [hp]”

2.1.12 Calculate the average of the top 5 readings.

2.1.13 This number is the official “Actual Power” reading for that competitor in that session.

3 Procedures at Race Event

3.1 On Arrival

3.1.1 An official power to weight eligibility form will be provided to the Licensed Eligibility Scrutineer by series administration.

3.1.2 If a competitor has more power than ‘Standard’ they must declare a new ‘Standard’ power figure to the scrutineer **before** qualifying in order to receive a new ‘Standard’ minimum weight limit.

3.1.3 The new ‘Standard’ power figure and new ‘Standard’ minimum weight limit will be recorded on the power to weight eligibility form.

3.1.4 Where Power is not known

3.1.4.1 If a new power figure is not known, (e.g. at the start of the season) the class power to weight limit will be used to establish eligibility for qualifying.

3.1.4.2 Having established a power reading during qualifying, a new ‘Standard’ power figure and a new ‘Standard’ minimum weight limit will be set for racing.

3.1.4.3 In these circumstances, it is the competitors responsibility to ensure that they do not breach the class power to weight limit.

3.1.4.4 The competitor is free to declare a different ‘Standard’ power figure. This may make sense where a competitor feels that the measurement was artificially low.

3.1.4.5 Where a power figure cannot be established after qualifying, the competitor will be required to declare a ‘Standard’ power figure to the eligibility scrutineer, which must not be exceeded during the race.

3.2 Qualifying

3.2.1 After qualifying, All cars will assemble in Parc Ferme.

3.2.2 Before leaving Parc Ferme, Compact Flash cards will be removed under supervision of the data logging analyst. Drivers must sign to confirm that their Compact Flash card has been received by the data logging analyst.

3.2.3 The Compact flash cards will be returned following analysis.

3.2.4 Weighing

- 3.2.4.1 All cars, with the driver onboard, will be weighed by the Eligibility scrutineer before leaving Parc Ferme.
 - 3.2.4.2 Actual weights to be recorded on the official power to weight eligibility form.
 - 3.2.4.3 When all cars have been weighed, the eligibility scrutineer will declare whether each car is eligible or not.
 - 3.2.4.4 There will be no tolerance – teams should ensure that they have sufficient ballast to take account of variability in the accuracy of weighing scales.
 - 3.2.4.5 Where a car does not have a 'Standard' power figure, the power to weight limit will be used to establish eligibility. Therefore compliance will only be established after power verification.
 - 3.2.4.6 Any vehicle whose car/driver combination weighs less than the 'Standard' minimum weight will be declared ineligible, and the competitor will be subject to a penalty as defined in section 4.1.1 of the Series sporting regulations.
- 3.2.5 Power Validation
- 3.2.5.1 The standard power measurement procedure (defined above) is to be employed.
 - 3.2.5.2 Actual Power Figures to be recorded on the power to weight eligibility form.
 - 3.2.5.3 Where the actual power figure is in excess of 102.5% of 'Standard' power, the competitors vehicle will be declared ineligible and the competitor will be subject to a penalty as defined in section 4.1.1 of the Series sporting regulations.

3.3 Race

- 3.3.1 After the race, all cars will assemble in Parc Ferme.
- 3.3.2 Before leaving Parc Ferme, Compact Flash cards will be removed under supervision of the data logging analyst. Drivers must sign to confirm that their Compact Flash card has been received by the data logging analyst.
- 3.3.3 The Compact flash cards will be returned following analysis.
- 3.3.4 Weighing
 - 3.3.4.1 All cars, with the driver onboard, will be weighed by the Eligibility scrutineer before leaving Parc Ferme.
 - 3.3.4.2 Actual weights to be recorded on the official power to weight eligibility form.
 - 3.3.4.3 When all cars have been weighed, the eligibility scrutineer will declare whether each car is eligible or not.
 - 3.3.4.4 There will be no tolerance – teams should ensure that they have sufficient ballast to take account of variability in the accuracy of weighing scales.

3.3.4.5 Any vehicle whose car/driver combination weighs less than the 'Standard' minimum weight will be declared ineligible, and the competitor will be subject to a penalty as defined in section 4.1.2 of the Series sporting regulations.

3.3.5 Power Validation

3.3.5.1 The standard power measurement procedure (defined above) is to be employed.

3.3.5.2 Actual Power Figures to be recorded on the power to weight eligibility form.

3.3.5.3 Where the actual power figure is in excess of 102.5% of 'Standard' power, the competitors vehicle will be declared ineligible and the competitor will be subject to a penalty as defined in section 4.1.2 of the Series sporting regulations.

3.3.5.4 Post race power validation will not delay the race award ceremony.

7. REGISTRATION FORM

Please complete in capital letters

NAME OF DRIVER: _____

ADDRESS: _____

_____ POSTCODE: _____

TEL(DAY): _____ (EVE): _____

AGE: _____ DATE OF BIRTH: _____

NATIONALITY: _____

COMPETITION LICENCE No: _____ GRADE: _____

BARC MEMBERSHIP No: _____ (Mandatory)

TVRCC MEMBERSHIP No: _____ (Mandatory)

NAME OF ENTRANT: _____

ADDRESS: _____
(if different from above)

_____ POSTCODE: _____

TEL(DAY): _____ (EVE): _____

ALL CORRESPONDENCE SHOULD BE SENT TO: DRIVER ENTRANT

CAR: _____ T V R _____ MODEL: _____ CC: _____

CLASS: CLASS A CLASS B: INVITATION CLASS:

PREFERRED COMPETITION NUMBER: -----

PLEASE COMPLETE REVERSE OF FORM

SIGNATURE OF ENTRANT: _____
(if different from Driver)

SIGNATURE OF DRIVER: _____

PREVIOUS RACING EXPERIENCE OF DRIVER: _____

TO BE COMPLETED BY ALL APPLICANTS:

I wish to register for the 2005 TVR CC CHALLENGE CUP SERIES and I declare that the information given above is correct. I understand that should the above information change in any way I will confirm details in writing to the BARC as detailed below.

SIGNED: _____ DATE: _____

ONCE FULLY COMPLETED THIS FORM SHOULD BE RETURNED TO:
The British Automobile Racing Club, Thruxton Circuit, Andover, Hampshire. SP11 8PN.

PRIOR TO THE FIRST RACE ENTERED

FOR OFFICIAL USE ONLY
REGISTRATION FEE FREE
DATE RECEIVED:.....
DATE REGISTRATION CARD SENT:.....
COMPETITION NUMBER ALLOCATED:.....