

2010 PISTONHEADS.COM CATERHAM RACE ACADEMY

1. SPORTING REGULATIONS - GENERAL

1.1 Title & Jurisdiction:

The **2010 PISTONHEADS.COM CATERHAM RACE ACADEMY** (referred to as the 'PistonHeads.com Caterham Academy' or 'Caterham Academy') is organised and administered by the British Automobile Racing Club Ltd (BARC) 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. The organisers reserve the right to issue additional statements clarifying items in the rules and regulations and all such statements will be issued to all registered drivers by posting to the address details on the registration form.

MSA Championship Permit No: **CHR2010 / 036**

Race Status: **National B**

MSA Championship Grade: **C**

1.2 Officials:

1.2.1 Coordinator: Kim Denning

1.2.2 Licensed Eligibility Scrutineer: Derek Smith

1.2.3 Championship Stewards: Dale Wells BARC
Rick Smith BARC
Robin Knight 750MC

Any three of the above may reach a decision

1.3 Competitor Eligibility:

1.3.1 This Championship is only open to novice competitors.

1.3.2 Drivers must be fully paid up valid racing membership card holding members of the BARC, be Registered for the Championship and be in possession of valid MSA Competition (Racing) National B Licence minimum.

1.3.3 Competitors who compete in the **2010** Championship will not be eligible under any circumstances to compete in the **2011 or any future Academy** championship.

1.3.4 Caterham Cars Ltd reserves the right to enter a 'Celebrity/Development/Guest' car at any event. This car and driver(s) will not score points but may be awarded individual race trophies if the finish position merits it; the competition Number 7 will be reserved for this entry.

1.3.5 Drivers of the celebrity / press car are exempt from the above membership requirements provided that no championship points are scored in this car.

1.3.6 All necessary documentation must be presented for checking at all rounds when signing-on.

1.3.7 Competitors are responsible for the transport of their Academy race cars to and from events. The use of team support and team transporters is prohibited.

Caterham Midlands provides centralised technical support at all Academy events. Team support of any other kind is specifically prohibited at competitive events. A team is defined as an organisation professionally involved in the build, preparation, set-up or transport of track day and/or competition cars. Support is defined as providing assistance, transport, timing or any other activity associated with the running of a car at a competitive event. Competitors are permitted to help each other and enlist the support of family and friends on a strictly amateur basis. It is permitted to share transport for a maximum of two cars using a suitable trailer or recovery vehicle, but the use of HGV class transporters is strictly prohibited.

1.4 Registration:

- 1.4.1 All drivers must register as competitors for the championship by returning the Registration Form to the Coordinator prior to the Final Closing date for the first round being entered. Competitors will have the option of registering for the championship using only one of the calendars listed in regulation 1.5. It is not permissible to exchange entries between calendars once a registration has been accepted.
- 1.4.2 It is a condition of registration into the **2010** Caterham Race Academy that competitors undertake not to participate in any other form of competitive motorsport (as authorised / permitted by the MSA) from the date of registration into the Academy to the date of the last Academy event held in the **2010** season without the prior written permission of the Academy Coordinator. As a general rule, such permission will not be granted except in exceptional circumstances and the decision of the Coordinator in this matter will be final. (See 2.2.1. & 2.2.2.)
- 1.4.3 Acceptance of registration into the Academy is entirely at the discretion of Caterham Cars and the Academy Coordinator.
- 1.4.4 The registration is FREE
- 1.4.5 Registrations will be accepted from 1st January **2010** until further notice.
- 1.4.6 Registration numbers will be the permanent Competition numbers for the Championship. Each registered driver will be allocated a permanent number for the season by the Championship Coordinator and these will be issued strictly on receipt of a fully completed registration form.

1.5 Championship Rounds:

The **2010 PISTONHEADS.COM CATERHAM RACE ACADEMY** will be contested over **7** Rounds as follows:

Round:	Date:	Venue/Circuit:	Organising Club/Centre	Discipline
1	24 April 2010	Aintree	Liverpool MC	Sprint
2	15 May 2010	Curborough	BMMC	Sprint
3	29 May 2010	Snetterton	BARC (SE)	Sprint
4	03-04 July 2010	Rockingham	BRSCC	Race
5	25 July 2010	Snetterton	BRSCC	Race
6	21-22 August 2010	Brands Hatch	BRSCC	Race
7	19 September 2010	Mallory Park	BRSCC	Race

- 1.5.1 In accordance with MSA regulation **D11.1**, 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 Scoring:

- 1.6.1 Points will be awarded to Competitors listed as classified finishers in the Final Results as follows:-
20 18 17 16 15 14 13 12 11 10 9 8 7 6 5 4 3 2 plus 1 point to all other finishers.

An additional point will be awarded for the fastest lap at each race.

- 1.6.2 An additional 5 championship points may be claimed by any registered competitor who completes a full day of marshalling at any MSA Permitted 'race event' (speed events do not count) and who submits the points claim form, duly signed, by the Clerk of the Course at the event in question.

- 1.6.2 The totals from all qualifying rounds, **less one**, will determine final championship points and positions.

- 1.6.3 Ties shall be resolved using the formula in Regulation **Q3.4** of the 2010 MSA Yearbook.

1.7 Awards:

- 1.7.1 All awards are to be provided by the individual organisers of each championship event

- 1.7.2 Per Round: Trophy to 1st, 2nd & 3rd.

1.7.3 Championship: Trophy to overall Champion and the winner of the other calendar listing.

Any driver failing to attend the Caterham Motorsport Dinner & the BARC Championship prize-giving at the end of season (date and venue to be announced in the BARC Startline Magazine) may not be eligible to receive any prizes which may have otherwise have been presented at this function. Such prizes may be withheld and not be re-presented to any other driver.

1.7.4 Bonuses: NIL

1.7.5 Presentations:

Commemorative awards and / or Trophies are to be provided for presentation at the end of each race or at an end of the meeting presentation ceremony.

1.7.6 Entertainment Tax Liability.

In accordance with current government legislation, the BARC is legally obliged to withhold tax at the basic rate on all payments to non-UK resident sportsmen/women.

That is, those persons who do not have a normal permanent residence in the UK. The UK does not include the Isle of Man, Channel Islands or Eire. This means that, as the organiser, the BARC is required to deduct tax at the relevant rate - currently 23% - from any such payments they may make to non-UK residents.

Under certain circumstances, it may be possible for competitors to enter into an agreement with the Inland Revenue to limit the tax withheld. Any application for such an arrangement must be made in writing and not later than 30 days before the payment is due.

For further information contact:- The Inland Revenue, Foreign Entertainers Unit, 2nd Floor, Unit 1 Princes Gate, Homer Road, Solihull, West Midlands. B91 3SA. Tel: 0121 712 8601. Fax: 0121 712 8662.

1.7.7 Title to all Trophies:

In the event of any Provisional Results or Championship 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 C of the 2010 MSA Yearbook and these Regulations.

2.2 Championship: In accordance with Section C of the 2010 MSA Yearbook and these Regulations.

2.2.1 It is a condition of registration into the **2010** Caterham Race Academy that competitors undertake not to participate in any other form of competitive motorsport (as authorised / permitted by the MSA) from the date of registration into the Academy to the date of the last Academy event held in the 2010 season without the prior written permission of the Academy Coordinator. (see 1.4.2.)

2.2.2 Any registered competitor who is found not to have complied with this undertaking will be reported to the Stewards of the Championship for the application of sanctions which may include total exclusion from the Championship.

3. SPORTING REGULATIONS - RACE MEETINGS & RACE PROCEDURES

3.1 Entries:

- 3.1.1 Competitors are responsible for sending in correct and complete entries direct to the Championship Coordinator as requested.
- 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 Championship Coordinator AND 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 There is no provision for Qualification races.
- 3.1.5 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. At race events 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:

At all events 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 Qualification:

- 3.3.1 At race events the minimum period of qualifying to be provided is to be as specified in the MSA Regulations in respect of the circuit lengths.
- 3.3.2 Should any Qualifying Session be disrupted the Clerk of the Course shall not be obliged to resume or re-run the session to achieve the championship criteria and the decision of the Clerk of the Course shall be final.
- 3.3.3 At sprint and hillclimb events the organisers will advise by means of supplementary regulations/final instructions how many practice and timed runs will be available.

3.4 Qualification Criteria: At race events each driver should complete a minimum of 3 laps qualifying 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 **Q4.5**. 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 **Q4.5**.

- 3.4.1 At sprint & hillclimb events each driver must qualify by successfully completing at least one practice run to the satisfaction of the organisers.

3.5 Races: At race events 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 Race Starts:

- 3.6.1 At race events 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.

1 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 At all events the use of tyre heating/heat retention devices, tyre treatments and compounds is prohibited.

3.6.4 At race events 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 At race events any drivers unable to start the Green Flag/Pace lap or start are required to indicate their situation as per MSA Regulation **Q12.13.2** 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 At race events 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 At race events 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 National Flag

3.6.8 At non race events starts will be in accordance with Section S of the **2010** MSA Yearbook and the SR's will specify the method of timing and the starting signal.

3.7 Practice / Race Stops:

3.7.1 Should the need arise to stop any **practice or qualifying session**, 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 **pitlane**.

3.7.2 Should the need arise to stop any **race**, 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** which will automatically become a Parc Ferme area.

Cars **should** not enter the Pits unless directed to do so **or unless repairs are necessary**. Work on cars already in the Pits must cease when a race is stopped and may only continue under the control of Scrutineers. Cars which are in the pitlane or who enter the pitlane may **ONLY** re-start from the pitlane (not the grid) after all other cars have re-started. Non runners at the time of the stoppage (which have been recovered) can re-start from the pitlane behind those referred to above.

3.7.3 Case A - Less than two laps completed by Race Leader

The race will be null and void. The race will re-start from the original grid positions. Competitors unable to take the re-start may be replaced by nominated reserves who will start from the pitlane in reserve number order and in front of any other pitlane starter. Gaps on the grid should not be closed up. The length of the re-started race will be determined by the Clerk of the Course.

3.7.4 Case B - More than two laps completed by Race Leader but less than 75% of Race Distance:

The race will restart from a grid set out by the finishing order of part one (as per **Q5.4.3**). The final result of the race will be the finishing order of part two. The length of the re-started race will be determined by the Clerk of the Course.

3.7.5 If the leader has completed more than **75%** of the race distance or duration it shall not usually be re-started (as per **Q5.4.3**). If not re-started the results will be based on the order of crossing the finish line at one lap less than at the time of first showing the Red Flag. Only cars which are under their own power at the showing of the Red Flag will be classified.

3.8 Re-Scrutiny:

At race events 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 & Pitlane Safety: At race events

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 pit lanes.

3.9.3 Refuelling: May only be carried out in accordance with the MSA Regulations **Q13**, Circuit Management Regulations and the SR's or Final Instructions issued for each Circuit/Meeting.

3.10 Race Finishes:

At race events 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:

At all events 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 - Race Events:

3.12.1 All competitors will be required to fit an Electronic Self Identification Module (Transponder) to their car (**Q12.2.1**) 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.

3.13 Safety Car:

There is no provision for the use of a Safety Car in any event forming a round of this championship.

4. CHAMPIONSHIP EVENT 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: **C3.3**.

4.1.2 Arising from post EVENT Scrutineering or Judicial Action:
Minimum Penalty: The provisions of MSA Regulations: **C3.5.1 (a) & (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 **C3.5.1 (c)**.

4.1.3 Additional specific championship penalties: At the discretion of the Championship Stewards.

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

As per 2010 MSA Judicial Procedure Regulations.

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5. TECHNICAL REGULATIONS

5.1 Introduction:

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 specify that you can do it, you should work on the principle that you cannot. All references to the MSA Yearbook (blue book) relate to the **2010** edition.

Due to the continued development of the Steel Fabrication chassis and associated parts, Caterham Cars Ltd reserve the right (in accordance with **D11.1** to change parts or part numbers specified within these regulations, at any time during the life of these regulations, and without prior notice.

5.1.1 Scrutineering

The official MSA Eligibility Scrutineer or his appointed deputy will be attending rounds of the championship and he is available to provide advice as well as ensuring that the regulations are strictly enforced to ensure fair play.

All **2010** Caterham Academy cars must comply with the requirements as laid down in the Technical regulations at all times, whether during official practice or racing and it is the Entrants responsibility to ensure all such requirements are met. Any infringement of the Technical Regulations will render the competitor liable to penalties as set out in section 4 of these regulations.

Technical checks may be carried out before, during and after practice and again at the end of the race. The eligibility scrutineer or his appointed deputy is empowered to undertake any form of technical verification procedure that he deems necessary and may order the removal of parts from the car, substitution of standard parts, or for the car to be otherwise dismantled in order to carry out inspection. This specifically includes the substitution of parts at random and the scrutineer has the right to swap any components such as engine ECU's.

The eligibility scrutineer or his appointed deputy reserves the right to check any suspect part directly with a standard part as supplied by Caterham Cars Ltd. Suspect parts that might need to be removed for checking elsewhere will be marked by official MSA approved seals and a certificate of sealing will be handed to the competitor or his agent. This certificate will detail the seals and the precautions that need to be taken to keep the seals intact. The competitor will be notified in writing of the date, time and place of the examination and of the right of the competitor or his agent to be present at such an examination. Should the competitor or his agent not be present whilst his car is being dismantled for checking, no dispute over his vehicle or its components will be entertained. All costs will be borne by the competitor.

It is a condition of the championship that any vehicle may be selected for an engine power test by the eligibility scrutineer or his approved deputy immediately after a race or timed practice and its brake horsepower measured over a representative range of engine speeds. The organisers cannot be held responsible for mechanical damage to engines and transmissions when under test. However such tests will not put the cars through any stresses beyond normal design limitations.

Although the coordinator and technical personnel from Caterham Cars are happy to advise competitors on rules and regulations, they are not empowered to give any kind of judgement regarding the eligibility of cars.

Finally, don't forget that although your scrutineer is happy to speak to you about these regulations, it is extremely discourteous to contact him after 10.00pm.

5.2 General Description:

The **2010 PistonHeads.com** Caterham Academy is a one make racing series for competitors participating in 1.6 Ford Sigma engine powered Caterham Sevens specifically produced for the **2010** Caterham Academy Series in road going form to a controlled specification. No modifications whatsoever are allowed from the basic specification except those described below.

All cars must comply with construction and use regulations in every way. Competitors should be prepared to produce registration documents at scrutineering.

5.3 Safety Requirements:

All cars must conform to the general and competition regulations of the MSA which define minimum safety requirements for racing purposes. All cars must conform to these regulations before they can be accepted for either racing or official practice. You should refer to the MSA Yearbook sections **J5** Tech, **Q19** Tech and **K** Safety Requirements.

A Caterham supplied Roadsport rollover cage (Caterham part numbers 30P022A or 30P022B is mandatory)

- i) Use of Caterham supplied side impact / rear wheel protection bar (Caterham part number 37P034A) is mandatory.
- ii) A head restraint to **K13** must be fitted which must measure a minimum of 10cm x 10cm and be situated not more than 5cm behind the driver's head. The design of the head restraint is free provided that it conforms to MSA regulation **K13**. There should be clearance of at least 5cm between the top of the driver's helmet and the top of the roll cage. Competitors should note that the Caterham composite seat (part number 73467) must have an additional Caterham restraint fitted behind the headrest to meet MSA requirement **K13**

Fitment of roll cage padding (Caterham Part number 79136) to the roll-cage main rear hoop, roof diagonal and driver's side cant rail is mandatory.
- iii) A six point full harness safety belt must be fitted complying with **K2.1.3 (Q19.14.2)**. Belts designed to pick up on the correct points on the chassis are available from Caterham Cars. The use of arm restraints is mandatory. **These are** available from Caterham Cars (**Caterham part number DAR-Black**). Competitors are reminded **it is mandatory** to replace complete belt sets involved in accidents according to **Section K**.
- iv) A 2.25 kilo plumbed in fire extinguisher system fitted to **K3.1.2 (Q19.14.7)** is mandatory.
- v) An electrical master switch to **K8** capable of isolating the battery and ignition systems must be fitted in such a [position that it can be operated from both inside and outside the car. The switch and wiring provided allows it to be located on the offside of the scuttle within the windscreen stanchion where the protective eyebrow must be used. It is not mandatory to use a Caterham supplied switch.
- vi) The electrical cut out must be marked by a red 'spark' on a blue triangle.
- vii) The ignition switch 'OFF' position must be marked.
- viii) The battery (Caterham part number 53034W) must be located within the engine bay and its terminals must be protected by a non-conductive cover. The earth lead must be clearly marked in yellow. MSA regulations require that only the battery master switch may be connected to the battery.
- ix) The rear bulkhead behind the driver and over the petrol tank must be made flameproof to **Q19.1.1**. The boot floor over the petrol tank must be an aluminium honeycomb panel as supplied by Caterham Cars. An aluminium cover must be placed over the rubber fuel filler hose. The use of tank tape to seal the boot floor to the rear bulkhead is not considered sufficiently flameproof. Aluminium tape must be used available under Caterham part number 77519. Alternatively, a Caterham supplied F1 style safety cell may be fitted (package number FT400RP).
- x) The Caterham Cars supplied FIA approved LED type high intensity rain light is mandatory (Caterham part number 37L048A) A Caterham high intensity rear light must be fitted in the standard position.(Caterham part number 71187) at all times, see 5.10.2
- xi) The engine breather system must remain closed and standard at all times.
- xii) All chassis are manufactured with aluminium honeycomb chassis side protection, which must not be removed.
- xiii) You should also refer to section **K9** concerning overalls and **K10** for crash helmets. The wearing of balaclavas and flameproof gloves are mandatory in this championship. Competitors are also strongly advised to wear flameproof underwear and flameproof race boots.
- xiv) Use of an FIA approved Hans device is only permitted if the device, competitor's helmet, 6 point harness and car have all been simultaneously presented at Arch Motor & Manufacturing Ltd, Caterhams approved **Hans** device fitters, to allow any necessary chassis modifications to the upper seat belt anchorages to be made. Competitors should be aware that chassis modification will be refused unless supporting paperwork is supplied to specify the correct locations of the upper seat belt anchorages. Furthermore modifications will be refused unless 6 point safety harnesses specifically approved for use with the Hans device are presented. Furthermore modifications will be refused unless the helmet presented is specifically manufactured to be used in conjunction with a Hans device. A charge will be made to modify the chassis and proof of modification will be issued by Arch Motor & Manufacturing Ltd. Competitors may be asked to prove FIA compliance of their Hans Device and to present their proof of modification paperwork at scrutineering.
- xv) All chassis are manufactured with towing eyes front and rear, which are provided as standard on the chassis and these should be clearly marked with an arrow in a contrasting colour.

- xvi) It is recommended that any space between the drivers seat back and the seat back bulkhead is filled with twin pack seat foam.

5.4 General Technical Requirements & Exceptions:

This is a one-make formula and all cars are to be in identical specification with the exception of the adjustments permitted by these regulations.

No standard components can be modified, substituted, relocated or changed in any way except those specified herein.

In recent years Caterham Cars Ltd's part numbering system has been revised. New part numbers now consist of seven digits. The last digit of this seven digit number is a suffix which will be 'A' for any new part. If there is a minor change to the part such that it is completely interchangeable with the outgoing part and supersedes it completely (for example, a change of supplier or material), the part number suffix will be changed to 'B' and so on. As a change may occur during the racing season, such a part may be used to replace a part identified with an earlier suffix (only) within these regulations.

The battery (Caterham part number 53034W) must be located in the standard factory position located within the engine compartment.

If in the light of experience safety related changes to these regulations are necessary, competitors will be given at least ten days notice to effect modifications.

All vehicles must comply with MSA General Technical Regulations contained within Sections **H & Q** of the current MSA Yearbook.

5.5 Chassis (see Chassis/Bodywork)

5.6 Chassis/Bodywork:

Vehicles eligible for this Championship must be the **2010** specification 1600 Academy-Roadsport chassis (Part number 30P001A or 30P008A).

5.6.1 Chassis Modifications Permitted

i) General:

All chassis repairs must be carried out by Steel Fabrications, Arch Motor & Manufacturing Ltd or Caterham Cars, except temporary repairs undertaken at the event where representative of Caterham Cars or the scrutineers must inspect the car prior to competition. All sports cars competing in sprints and hill climbs must fit the timing strut provided.

ii) Interior:

The driving seat is free but it is important to note that the driver's helmeted head must be at least 5cm below the top of the rollover bar when normally seated.

The chassis part number 30P001A is supplied with a lowered floor on the drivers and passengers sides. The chassis part number 30P008A is supplied with standard flat floors on both sides. It is permitted to replace the driver and passenger floors with a Caterham flat floor panel on chassis part number 30P001A or replace the flat floor panels with a lowered floor on chassis part number 30P008A.

iii) Exterior:

Hoods are prohibited for both practice and race. Cars may run with tape extending from the windscreen back to the front hoop of the roll cage, but no further, to prevent rain from reaching the inside of the windscreen. Tape may be used to help secure tonneau covers and doors/half doors, but can not be used to seal bonnet gaps. It is permitted to use tape as an temporary measure to secure damaged wings and nose cones at events, but competitors are expected to present there cars at scrutineering at the next event properly repaired

Cars must be fitted with at least two mirrors at all times (when doors are removed)

The chassis is supplied without a spare wheel carrier and must compete without one fitted.

It is permitted to use paint protection film (eg Armourfend) to protect paintwork on the leading edge of rear wings. The fitment of rear wing protectors, either stainless steel or carbon fibre, is prohibited.

A short under-tray designed to protect the crankshaft pulley and belt is available from Caterham Cars (part

number 70113). No other under-trays are permitted. It is permitted to cut a hole in this tray to allow use of an MST transponder.

It is permitted to use Caterham half side screen (Part nos 76257A and 76258A)

It is permitted to fit a plain windscreen glass (Part no: 76050) in place of the standard heated glass.

It is permitted to use Caterham Wind Deflectors (Part no. 77321)

iv) Silhouette: No modifications allowed.

5.6.2 Chassis Modifications Specifically Prohibited

i) General:

The standard chassis must be used unmodified in any way and strengthening or stiffening, by whatever means, is expressly forbidden, other than those specified in 5.6.1. Only the honeycomb panels permitted in these regulations may be fitted. These should not be bonded into place, but can be riveted to the aluminium floor, not the chassis rails.

ii) Interior:

Do not attempt to add any extra stiffness to the chassis frame. The eligibility scrutineer or his appointed deputy reserves the right to select cars to be returned to the Caterham Cars factory to have torsional stiffness measured. Should there be any deviation from accepted production tolerances the assumption will be made that modifications have been made and that chassis will not be permitted to race again, notwithstanding the application of any penalties.

Fitment of the drivers side honeycomb panels (part no: 76817 – front section) is allowed to raise the drivers feet. Fitment of a carbon fibre dashboard is prohibited

iii) Exterior:

It is not permitted to drill any holes into or to modify the outer skin or inner panelling of the car except where specified in the assembly instructions, other than where chassis bushes have been factory drilled to expose them.

Wings and nosecone must remain in glass fibre as standard and the substitution of aluminium or carbon fibre items even though available from Caterham Cars is not permitted.

Standard UK number plates measuring 520mm x 110mm must be fitted vertically front and rear although these do not need to display the registration number of the vehicle.

iv) Silhouette:

Standard full windscreens must be fitted at the correct angle and no additional holes are permitted to be made in the bodywork.

The front wing location must be fitted as designed by Caterham Cars. The leading edge of the wing to the centre line of the front arm of the wingstay must be 65mm +1/-10mm

v) Ground Clearance:

Ride height may be adjusted subject to a minimum 140mm ground clearance measured from the lowest point on the chassis side rails underneath the second suspension leg excluding bolts, screws, nuts and rivet heads with the driver normally seated in the car

5.7 Engines:

Only the 1.6 Ford Sigma sealed engines are eligible for this championship as supplied from Caterham **Cars Ltd (Caterham part no 36E017A)**.

In the event of an engine failure or wear, the engine must be returned to the Caterham factory, or Caterham Midlands to be rebuilt and resealed. It is the competitor's responsibility to return their engine, fully kitted, and to pay the cost of the rebuild.

Use of spark plugs Caterham part number 36E038A is mandatory.

5.7.1 Permitted Modifications

No modifications are allowed to the 1.6 Ford Sigma engine and its ancillaries.

5.7.2 Prohibited Modifications

It is strictly forbidden for a competitor to modify, remove or substitute any component or part of the engine or any of its ancillaries, nor should the MSA seals be removed or tampered with. Should these seals be damaged or removed for whatever reason except under the direction of the MSA scrutineer, the car should not be raced or practised until the MSA scrutineer has inspected the engine and refitted the correct seals. The scrutineer may require that the engine be removed and taken to be power tested and, if necessary, dismantled for inspection, the costs of which will be borne by the competitor.

All engine rebuilds/repairs or the fitment of updated components must be carried out by the Caterham factory or Caterham Midlands.

5.7.3 Engine Location within the Chassis

On no account must the engine be relocated within the chassis and only the standard Caterham engine mounting brackets and rubbers are permitted.

5.7.4 Cooling System

It is mandatory to fit the Caterham stone guard (part no. 77778) between the radiator and the grille (part number 77777A.)

It is permitted to fit a dashboard mounted manually operated cooling fan switch.

No other modifications are permitted to the cooling system.

5.7.5 Induction System

Use of Caterham throttle pedal stop (Part number 74128 or 30PO48A) is mandatory.

No modifications are permitted.

5.7.6 Exhaust System

The Caterham exhaust system incorporating a catalytic converter is supplied as standard to allow registration of the vehicle and comply with Construction and Use regulations and must be fitted at all times. The only permissible exhaust system is available under the following Caterham part numbers:

Silencer	36X013B
Cat/Collector	36X012B
Cylinder No 1	36X014A
Cylinder No 2	36X015A
Cylinder No 3	36X016A
Cylinder No 4	36X017A

The use of the exhaust guard fitted to the cat/collector under Caterham part number 70262 or 70262B is mandatory.

Either external or internal modifications by means of application of additional material or by a manufacturing / coating process are prohibited.

The series scrutineer is empowered to emission test cars to check the effectiveness of the catalyst.

5.7.7 Ignition System

The electronic management system must be used unmodified in any way and may be exchanged or tested by direct comparison with a factory supplied unit.

It is specifically prohibited to fit any ducting to the starter motor or elsewhere in the system.

5.7.8 Fuel Delivery System

It is permitted to move the fuel pump from the standard location only if a bag tank is fitted and the standard Caterham supplied item must be used. No other modifications are permitted.

5.8 Suspension:

2010 Caterham Academy cars are supplied with De Dion suspension which must remain standard with the exception of the modifications permitted below.

Cars must retain narrow track front suspension.

The only permitted dampers are part number 75526 (front) and 75531(rear).
The only permitted springs are part number 75511 (front) and 71198 (rear).

Front dampers must be fitted with the main body fixed to the lower wishbone. Rear dampers must be fitted with the main body fixed to the De Dion tube (right way up).

De Dion tubes should be changed as a matter of course following an accident. Furthermore it is recommended that tubes are regularly inspected for damage.

5.8.1 Suspension Modifications Specifically Permitted

Ride height may be adjusted using the damper spring seats supplied as standard subject to the minimum ride height requirements detailed in section 5.6.2.

It is permissible to adjust front camber to a maximum of 3° (negative) and castor angles by means of the adjustable length top wishbone provided and by shimming the lower wishbone with washers.

No modification can be made to the De Dion tube except that shims may be inserted to a maximum of 3° (negative) to adjust camber and toe angles as required.

The following Caterham supplied front anti roll bars are permitted:

<u>Diameter</u>	<u>Colour Code</u>	<u>Part No.</u>
$\frac{5}{8}$ "	Red	72090
$\frac{1}{2}$ " (standard)	Orange	72088

A front anti-roll bar must be fitted and connected at all times.

Front and rear damper spring seats may be modified by removal of metal only to allow great adjustment of spring positioning.

Circlip grooves may be added to the body of the shock absorber to allow for ride height adjustment. No other machining or modification in any way to the dampers themselves is permitted.

5.8.2 Suspension Modifications Specifically Prohibited

No other modifications whatsoever are permitted to the car's suspension and suspension components must not be modified in any way nor may suspension pick up points be changed. Use of any wide track front suspension components is specifically prohibited.

The bump rubbers may not be cut down or removed from the mandatory Bilstein dampers.

5.8.3 Wheelbase and Track

Must not deviate from the manufacturers specifications which are as follows:

Wheelbase:	2225 mm
Front Track:	1270 mm
Rear Track:	1346 mm
Overall Length:	3100 mm
Overall Width:	1575 mm

A tolerance of plus or minus 5mm is permitted to account for dimension changes caused by permitted suspension adjustment.

5.9 Transmission:

The standard transmission specification including gearbox, bell housing, clutch, axle and differential must be retained and all parts must be fitted and assembled correctly.

5.9.1 Transmission Modifications Specifically Permitted

Use of the Caterham clutch pedal stop (Part number 74127) is mandatory.

5.9.2 Transmission Modifications Specifically Prohibited

The use of limited slip differentials is strictly prohibited
Straight cut gears are prohibited.
Non standard gear ratio's are prohibited.
Use of the quick shift position of the gearlever is prohibited
Steel baulk rings are prohibited.
Steel blocker bars are prohibited.
Misassembly of parts, particularly in respect of the synchromesh mechanism is prohibited.

5.9.3 Transmission and Drive Ratios

Only the Caterham supplied Ford 5 speed gearbox (Caterham part number 36G003AC) may be used in the championship. The ratios within the gearbox must remain as per standard Caterham specification.

First	3.65: 1
Second	1.97: 1
Third	1.37: 1
Fourth	1.00: 1
Fifth	0.82: 1

The mandatory Final drive ratio fixed at 3.92 : 1 (Caterham part number 1627164R)

5.10 Electrics:

The standard electrical system and wiring loom must be retained with all items working correctly so that the car remains fully roadworthy at all times. All dashboard instruments must be kept as standard

It is permitted to remove or deactivate the steering lock. The specification of the ignition and starter switch is free and it may be positioned on the dashboard.

The standard fuel inertia cut out switch may be removed or relocated. Caterham Cars strongly recommend the relocation to the left hand side of the gear lever mounted on the centre tunnel just in front of the passenger seat.

All power feeds to the vehicle and engine looms must be connected via the master battery switch.

It is permitted to use a basic 'T100' or 'T200' type lap timer (available from Demon Tweaks and other sources). It is specifically prohibited to fit any other type of timing equipment or any data logging system.

5.10.1 Exterior Lighting

All exterior lighting must remain both standard and fully operative with the exception of the rear high intensity fog light which needs to be fitted but not working during all circuit racing events. See below 5.10.1

5.10.2 Rear High Intensity Light

A high intensity rear light to MSA Yearbook [K5] must be fitted. The Caterham Cars FIA approved LED type high intensity rear light, pre-fitted with the correct plug for ease of fitting to the existing vehicle loom, under part number 37L048A is mandatory, it must be fitted on the X braces of the rear cage with the supplied clamp type bracket under part number RSGU140-15. It is not permitted to drill or weld the roll cage.

5.10.3 Alternator

The standard alternator Caterham part number 36E116A must remain fixed, unmodified standard and working.

5.11 Brakes:

The standard braking system must be retained, **(standard front brake pads Caterham part number 30B031A and standard rear brake pads Caterham part number 30B032A)** apart from the following specific modifications.

5.11.1 Brake Modifications Specifically Permitted.

- i) The standard front brake pads may be replaced with Caterham competition front pads Caterham part number 74326. The rear brake pads must remain standard.
- ii) It is permitted to insert shim washers into the standard master cylinder or to fit an adjustment bolt to reduce 'dead' pedal travel.

No other brake modifications are permitted.

5.12 Wheels & Steering:

Use of 6" x 13" aluminium wheels as supplied by Caterham Cars under part no. 77296 is mandatory. **The wheels may be painted any colour.**

5.12.1 Permitted Options

The steering wheel is free.

It is permitted to fit the quick release steering column (part number 75030A).

5.12.2 Prohibited Options

Use of the 'quicker' ratio steering rack (part number 75605A) is specifically prohibited.

5.12.3 Construction and Materials

No changes are permitted except as specified in these regulations.

5.12.4 Dimensions

All dimensions must remain within manufacturer's specification, except where permitted in section 5.8.3 of these regulations.

5.13 Tyres:

5.13.1 Specification

Competitor's must use 185/70R13 tyres

Tread Depth must not be less than 1.6mm at the start or finish of events.

Use of tyre pressure limiting valves is prohibited.

Use of tyre heating and heat retention devices is prohibited.

Use of tyre treatment compounds is prohibited.

Tyre buffing is prohibited.

5.13.2 Nominated Tyre Manufacturer

Competitors must use only Cooper Avon 185/70 R13 86T CR322 tyres.

5.14 Minimum Weight Limit:

The car without driver must, at all times, weigh not less than 525kg. Competitors are recommended to weigh their cars and add sufficient ballast to allow for loss of bodywork during racing and / or variations in readings given by the weighbridges at individual circuits. Remember that it is the reading recorded by the circuit weighbridge on race day which counts.

The minimum weight limit including driver (including helmet, suit, gloves & overall) is 615Kg. Drivers lighter than 90kg may need to add ballast.

Any ballast required must be attached to the chassis using a minimum of 4 mounting points using bolts with a minimum diameter of 8mm each with steel washers of at least 400sq.mm surface area and 3mm thickness. Where ballast is fitted it shall be fitted on the passenger side of the cockpit (**J5.5**).

Substitution of alternative, non standard, lightweight fasteners is specifically prohibited.

5.15 Fuel Tank & Fuel:

5.15.1 Type of Fuel Tank

The standard fuel tank may be retained. An aluminium honeycomb protection kit (package number TI04P) is fitted as standard on **2010** Caterham Academy cars and is mandatory unless a fuel cell is fitted. A fuel cell as supplied by Caterham Cars and fitted as standard on the Caterham R400/R300 race cars may be fitted (package no. FT400RP)

The fuel tank vent must be installed to prevent spillage through the breather system. It may be necessary to fit a vent tube and additional check valve to prevent spillage when the tank is full.

5.15.2 Location of the Fuel Tank

The tank must be located in its correct standard position at the rear of the car.

5.15.3 Fuel

All cars must run on unleaded pump fuel as defined by the MSA. Use of leaded fuel at any time will permanently damage the mandatory catalytic converter.

5.16 Silencing:

All cars must be silenced to comply with MSA regulations under **J5.17**. The silencer supplied by Caterham Cars does comply with MSA regulations but performance will degrade with use. It is the competitors responsibility to ensure the car complies with the regulations and any supplementary regulations issued by the venues, which will be strictly enforced at many circuits.

5.17 Competition Numbers:

5.17.1 Positioning of Decals

Competition numbers must be positioned so as to be clearly visible from above and from the side, as per MSA regulations under **J4.1**. In particular, side facing number wrapped across the bonnet side are not acceptable, as they cannot clearly be read by the timekeepers.

The correct number squares must be used showing the championship title mounted on the nosecone and on each body side. Trade and sponsorship decals must be carried at all times and competitors will be notified of these before the first round. All cars must carry BARC shields.

5.17.2 Supply of Decals

Championship decals are available from the championship coordinator though competitors must provide their own racing numbers. Replacement decals and race numbers are available from Caterham Midlands and are available at all events.

BARC shields must be displayed on each side of the car at all times.

6. APPENDICES:

The following Commercial Regulations are “contractual” between the Entrant and / or Driver and the Organisers and / or Promoters and are not considered by MSA. Accordingly, the application of these Commercial Regulations by the Organisers and / or Promoters will not be subject to the Judicial processes of either the Championship Stewards and / or the MSA / MSC.

6.1 Race Organising Clubs & Contacts:

British Automobile Racing Club, Thruxton Circuit, Andover, Hampshire. SP11 8PN
TEL: 01264 882200 FAX: 01264 882233
E-mail: competitions@barc.net

Caterham Midlands Limited, The Knoll, Leicester Road, Earl Shilton, Leicester LE9 7TJ
TEL: 01455 841616 FAX: 01455 844299
E-mail: midlands@caterham.uk.com

Caterham Cars Ltd, Kennet Road, Dartford, Kent. DA1 4QN
TEL: 01322 625800 FAX: 01322 625810
E-mail: motorsport@caterham.co.uk

Kim Denning, 3 Drakes Gardens, Exmouth, Devon. EX8 4AD
TEL; 01395 260435 FAX: 01395 260435 Mobile: 07736 240470
E-mail: kim@caterhamracing.net

Derek Smith, Kynence, Blackpost Lane, Totnes, Devon TQ9 5RF
Tel: 01803 863255 Mobile: 07776 421757
E Mail: dereksmithscrutineer@btinternet.com

6.2 Commercial Undertakings:

- i) **The presentation of the car is fundamental to the profile of the championship/series its sponsors and its audience. Therefore in considering whether to permit any car to race, at any point during the season, the organisers will regard as paramount the presentation of the car. In taking into account its appearance inherent in which is the standard of its presentation (including interior) they may exclude any car which they consider may prejudice the reputation of the championship/series or is otherwise unacceptable.**

**This will include where the car is presented at a race event bearing accident damage sustained at a previous event and which has not been subject to the completion of a full and proper repair.
Note: A double header can be regarded as one event for the purposes of this regulation.**

- ii) **In addition to presentation of the car, the way that competitors present themselves in the paddock is a reflection upon Caterham Motorsport. Therefore, competitors are reminded to abide by the paddock plan issued within the final instructions, wherever possible. Private cars and trailers should be parked out of view allowing for the presentation of only Caterham race cars at the leading edge of the paddock area. Race cars should preferably be parked ‘nose-out’ and at ninety degrees to the paddock edge. Failure to cooperate in this fundamental piece of housekeeping may result in a competitor being advised to move their awning or vehicles during a race weekend and until done so to the satisfaction of Caterham and the organisers, may not be able to take any further part in the meeting.**
- iii) **On-circuit promotional activities: Competitors will be issued with championship sponsor decals and number squares. These must be displayed correctly positioned in order for the competitor to be eligible for points.**
- iv) **Television coverage: Competitors accept that in car television cameras may be fitted to their cars at any race or official practice session for a race as part of the promotion for the championship without charge. On no account should advertising be carried on cars in the cockpit area.**

2010 PISTONHEADS.COM CATERHAM RACE ACADEMY

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: _____ (Compulsory)

OTHER CLUB MEMBERSHIP: _____

NAME OF ENTRANT: _____

ADDRESS: _____
(if different from above)

_____ POSTCODE: _____

TEL(DAY): _____ (EVE): _____

ALL CORRESPONDENCE SHOULD BE SENT TO: DRIVER ENTRANT

CALENDAR 1 CALENDAR 2

PREFERRED COMPETITION NUMBER: -----

PLEASE COMPLETE REVERSE OF FORM

SIGNATURE OF ENTRANT: _____
(if different from Driver)

SIGNATURE OF DRIVER: _____

TO BE COMPLETED BY ALL APPLICANTS:

I wish to register for the **2010 PISTONHEADS.COM CATERHAM RACE ACADEMY** 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:

Kim Denning, 3 Drakes Gardens, Exmouth, Devon, EX8 4AD

PRIOR TO THE FIRST MEETING ENTERED

FOR OFFICIAL USE ONLY

REGISTRATION FEE – FREE

DATE RECEIVED:.....

DATE REGISTRATION CARD SENT:.....

COMPETITION NUMBER ALLOCATED:.....
