

The 360 Motor Racing Club 2012 2 hour Endurance Race

BRANDS HATCH GP (LONG) RACE CIRCUIT, KENT

September 16th 2012

1. SPORTING REGULATIONS – GENERAL

1.1 Title & Jurisdiction

The 360 2012 2 hour Endurance Race at Brands Hatch GP Circuit is promoted, organised and administered by 360 Motor Racing Club (hereafter referred to as “360MRC”) as an invited club of MSVR 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 regulations.

1.3 Competitor Eligibility

- 1.3.1 Drivers must be current members of the 360MRC
- 1.3.2 Drivers must be in possession of a valid 2012 MSA Competition (Racing) National B Licence or higher. In the case of non UK drivers, an equivalent competition licence issued by driver's ASN is required.
- 1.3.3 The lead driver will represent the team and the team owner. Where the entrant is not a nominated driver, that entrant must be in possession of a valid 2012 MSA Entrants Licence
- 1.3.4 **Please note: the word “Current” marked with an asterix (*) when referring to the MSA regulations or MSA Competitors Yearbook refers to the current valid regulation or MSA yearbook AT THE TIME OF THE MEETING and not at the time of publication of these regulations. IT IS THE ENTRANTS/DRIVERS/TEAMS responsibility to ensure that they are compliant at all times with the associated regulation.**

1.4 Registration

Entrance to the 2012 MRC 2 hour Endurance is subject to the agreement and the acceptance of the terms and conditions as specified in our terms and conditions on our website (www.360mrc.com) and the appendix to these regulations in conjunction with the following:

- 1.4.1 Entry for The 360 MRC 2012 2hr Endurance is subject to 1.4.2 below. Entries will be accepted from the date of publication of these regulations until no later than 10 days prior to the event or until the number of entries reaches 47, made up of 38 confirmed entries together with 9 reserves, unless by specific approval of the 360MRC committee.
- 1.4.2 The entry fee for the race is £850.00 (eight hundred and fifty pounds) including VAT at the current rate. **PLEASE NOTE, We no longer accept PAYPAL transactions** Cheque payments carry an additional £4.00 (four pounds) handling charge
- 1.4.3 Each team may pay the entry fee in two instalments with the first instalment being £300 and the balance payable by 30th August 2012. **Please note that membership of the 360MRC is automatically applied to anyone who is entered in the 2 hour event or any other race organised by the 360 MRC**
- 1.4.4 Teams may be allocated a racing number according to the class entered. A team may request to have a specific number applied to their vehicle; this allocation is applied on a first come first served basis. The provision of suitable physical race numbers, complying with current* MSA regulations, is the responsibility of the Entrant.
- 1.4.5 Teams will be issued with a driver identification system the use of which is mandatory.

1.5 Awards

- 1.5.1 Trophies will be awarded to the overall winner, overall second and overall third places. Within class structures
- 1.5.2 There will be an end of race presentation, with awards presented on the podium where possible. All competitors are encouraged to attend this ceremony.
- 1.5.3 Entertainment Tax Liability is not applicable.

2.0 SPORTING REGULATIONS – JUDICIAL PROCEDURES

In accordance with the relevant section of the current* MSA Competitors yearbook

3. SPORTING REGULATIONS – RACE PROCEDURES

3.1 Entries

- 3.1.1 Competitors are responsible for sending in complete and correct entries with the correct entry fee prior to the entry closing date which shall be 10 days prior to the event.
- 3.1.2 Incomplete or incorrect 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 any driver/car changes made after acceptance of any entry must be notified to the **The 360 Motor Racing Club** in writing. If driver/vehicle changes are made after publication of entry lists with Final Instructions the Competitor concerned must apply for approval by the Stewards of the Meeting before signing on.
- 3.1.4 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 after publication of the final grid positions. Reserve Number order shall be irrespective of class. If Reserves are given Grid Places prior to issue of the first Grid Sheet the times set in practice shall determine their grid positions. If Reserves are given places after publication of the Grid, Sheet and prior to cars being collected in the Official "Assembly 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 pit lane 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 start line or pit lane exit, whichever is the later. Such approval to start must be obtained from the **Clerk of the Course**.
- 3.1.5 Each entry will nominate a minimum of 1 and a maximum of 2 drivers. The same driver is permitted to be nominated for up to two cars, subject to Rule 3.8.6.but the driver must have qualified both cars for which they are entered in accordance with 3.3.3.

3.2 Briefings

- 3.2.1 Organisers will notify competitors and managers of the times and locations for all Driver and Team Manager Briefings in the Final Instructions.
- 3.2.2 It is mandatory that all competitors and managers of the teams attend all briefings.

3.3 Practice / Qualification

- 3.3.1 The period of practice/qualifying will be 30 minutes
- 3.3.2 Should any practice/qualifying session be disrupted, the Clerk of the Course shall not be obliged to resume the session or re-run sessions to achieve the event criteria and the decision of the Clerk of the Course shall be final.
- 3.3.3 Each driver should complete a minimum of 3 laps qualifying in the car to be raced in order to qualify for selection and order of precedence as specified in the current MSA Competitors Yearbook
- 3.3.4 The Clerk of the Course shall have the right to exclude any driver whose practice times or driving are considered to be unsatisfactory – as per the current* MSA Competitors Yearbook Regulation

3.4 Race

- 3.4.1 The scheduled duration shall be 120 Minutes.

3.5 Race Start

- 3.5.1 The race start will be in a two by two formation and a Rolling Start.
- 3.5.2 The race start countdown will have a minimum elapsed period of 3 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 License for the circuit.
- 3.5.3 The minimum countdown procedure/audible warnings sequence shall be:
 - 1 Minute to start of Green Flag Lap - Start Engines / clear Grid
 - 30 Seconds to start of Green Flag lap - Visible and audible warning
- 3.5.4 Any cars removed from the Grid after the 1 Minute stage or driven into the pits on the Green Flag Lap shall be held in the pit lane and may start the race after the last car to take the start from the grid has passed the start line or pit lane exit, whichever is the later.
- 3.5.5 Any drivers unable to start the Green Flag Lap or Start are required to indicate their situation as per the current* MSA Competitors Yearbook and any drivers unable to maintain grid position 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 from the pit lane or from a timed delay.
- 3.5.6 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.
- 3.5.7 The Rolling Start will be given by red lights on the Start Line being switched OFF. In the event of any starting lights failure the Starter will revert to the use of the National Flag.
- 3.5.8 Each row of the starting grid must cross the start line in grid formation

3.6 Practice / Race Stops

- 3.6.1 Should the need arise to stop any practice or the race, RED LIGHTS will be switched on at the Start Line and RED FLAGS will be displayed at the Start Line and at all Marshals Signalling Points around the Circuit.
- 3.6.2 This is the signal for all drivers to cease circulating at racing speeds, to slow to a safe and reasonable pace and in practice return to the pits but during the race to return to the starting grid area, which will automatically become a Parc Fermé area.
- 3.6.3 During the race, cars may enter the pits unless directed not to do so.
- 3.6.4 Please note, there is a traffic light system at Brands Hatch in respect of the exit to the pit lane, if the signal is red, entry to the race circuit is forbidden, drivers should wait until the signal is Green before leaving the pits.

3.7 Re Scrutineering

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

3.8 Pit Stops / Pit Lane Safety

- 3.8.1 Pit stops must only be carried out in accordance with the current* MSA Competitors Yearbook, Circuit Management regulations and the Supplementary Regulations or Final Instructions issued for the event.
- 3.8.2 The pit lane speed limit will be 40 mph (60 km/h). Pit lane speeds will be observed and checked.
- 3.8.3 The driver must adhere to the pit lane speed limit and then bring the car to a stop only in the permitted pit area or any area set aside for refuelling. For refuelling, the driver must switch off the engine, get out of the car and close the doors. The car must be on its wheels and not on jacks before refuelling can commence. Where the end of the exhaust pipe and/or hot brake material is in the proximity of the refuelling or venting connectors it must be covered with flame resistant material.
- 3.8.4 **REFUELING DURING PIT STOPS** There will be a minimum time duration of TWO minutes (120 Seconds) for refuelling stops. (that is two minutes from the time the car comes to a complete stop to the time it moves again) It is the sole responsibility of each team to time their refuelling pit stops. Timings will be independently checked by Timekeepers, Scrutineers and Pit Marshals who will be Judges of Fact in this respect. **Any team shortening their refuelling pit stop or mandatory pit stop from the regulated time will receive a one lap penalty, (See Section 6 “Infringements to sporting regulations”)** applied by the timekeepers before the end of the race. There is no time limit on pit stops not requiring refuelling with the exception of those identified in 3.8.5 below
- 3.8.5 There will be a mandatory pit stop of 2 minutes during the race and this will be regardless of refuelling or driver change for ALL competitors. Refuelling and/or driver change may take place when completing the mandatory pit stop. The Mandatory pit stop must be taken within the allotted pit window time The pit window will be opened after 15 mins into the race and closed after 105mins (15 mins from the end of the race) you may have additional pit stops outside the window but at least one must be within the window. **FAILURE TO COMPLETE THE MANDATORY PIT STOP WITHIN THE ALLOTTED PIT WINDOW WILL RESULT IN A PENALTY OF FOUR LAPS ADDED TO THE OFFENDING CARS POSITION AT THE END OF THE RACE (See Section 6 “Infringements to sporting regulations”)**
- 3.8.6 There is no limit to the number of pit stops a team may have, but at least one must be for the mandatory two minute duration within the pit window.

3.9 Refueling. – may only be carried out by either of the following two methods.

a) Cars fitted with 'Dry break' systems

b) Cars fitted with conventional fillers using Anglo American Tuff Jug or similar (i.e. with a pressure operated 'shut off' valve)

NO OTHER METHODS ARE PERMITTED and, for the avoidance of doubt, 'Jerry cans and funnels' are STRICTLY prohibited. All refueling equipment will be subject to scrutineering.

Note: Cars adopting Option b) above are advised that appropriate modifications may have to be made to allow the shut off valve of the refueling jug to operate satisfactorily.

Fuel filler caps must be 'leakproof' and breather pipes must be secured.

Cars dropping fuel, particularly on 'full tanks' will be subject to a Black/Orange flag and will only be allowed to continue with Scrutineers approval.

All pit stops for refuelling during the race will be a minimum of 120 Seconds, timed from the car coming to a stop in its permitted area until restarting from that area.

- 3.9.1 Drivers must be out of the car before refueling may commence. Each car must have a minimum of one fire assistant (who may also be one of the drivers) with a powder extinguisher, minimum 6kg, which must be supplied by the competitor. It is expressly forbidden to use any fire extinguisher provided by the circuit for this purpose. The fire assistant must only do the job of fire assistant. He is not permitted to assist the refueling staff or the team until refueling has been completed.
- 3.9.2 All refueling staff including the fire assistant must wear flame resistant overalls, gloves, balaclavas and goggles.
- 3.9.3 **Each car may only take on a maximum of 40 litres of fuel at each pit stop. No more than 40 litres may be carried to the pit apron at any one time. If a competitor or team is in any doubt it is their responsibility to seek clarification on the issue of refueling by contacting the 360 Motor Racing Club.**

4.0 Safety Car

During bad weather or in the event of a serious incident or the recovery of a disabled vehicle, the race may be neutralised in accordance with standard MSA procedures as described in the current* MSA Competitors Year Book.

5.1 Race Finish

- 5.1.1 The chequered flag will be shown to the leader the next time they pass the finish line after the duration of the race time.
- 5.1.2 After taking the chequered flag drivers are required to progressively and safely slow down, remain behind any competitors ahead of them and return to the pit lane, following the directions given by the Marshals or Officials.
- 5.1.3 All drivers must keep their helmets on and harnesses secured while on the circuit or in the pit lane.

5.3 Results

- 5.3.1 All Practice / Qualifying Timesheets, Grids and Race Results are deemed Provisional until all vehicles are released from Parc Fermé and/or after completion of any Judicial or Technical Procedures.

6.0 Infringements to Sporting Regulations

Infringement	During Qualifying	During Race
Pit Lane speeding	Black Flag	Stop / Go
Overtaking under Yellow Flag	Black Flag	Stop / Go
Overtaking under Safety Car	Black Flag	Stop / Go
Out of position Start		Stop / Go
Out of position on GFL		Stop / Go
Wrong direction in Pit Lane	Exclusion	Exclusion
More than 3 Laps under Black or Black and Orange Flag	10 place Grid Penalty	5 Lap Penalty
Working on car whilst refueling		2 Lap Penalty
Refueling Pit Stop during a Safety Car period (3.9.4)		1 Lap Penalty
Driver not out of car during any refueling	20 place Grid Penalty	5 Lap Penalty
All other refueling infringements	Back of Grid	At Clerk of the Course discretion
Mandatory or refueling Pit Stop under 120 seconds		1 Lap Penalty
Failure to complete a mandatory Pit Stop within pit window		4 Lap Penalty

5. TECHNICAL REGULATIONS

5.1 Introduction

It should be clearly understood that if the following texts do not clearly state that you can do it, you should work on the principle that you cannot.

5.2 Definitions

- 5.2.1 The 360 MRC 2hr Endurance race is open to saloon, coupe, GT, Roadsports and Sportscars fitting into FIA Appendix K periods G, H, I and J; and those cars originally homologated (FIA Appendix J of the period excluding Groups 2 and A) before December 31st 1999. The definition used herein of a saloon or coupe car is one that was in production and when in original specification had at least two doors and four seats.
- 5.2.2 GT cars are defined as those designated as such by the manufacturer and were produced and offered for sale by a manufacturer..
- 5.2.3 Cars not in strict compliance with these regulations may be eligible subject to 360MRC Technical Committee approval. The 360MRC reserves the right to refuse any entry (see 5.2.6)
- 5.2.4 Responsibility to prove eligibility is wholly that of the entrant. Presentation of a vehicle at/for scrutineering is a declaration by the entrant that the vehicle is prepared to a suitably high standard and eligible for the event.

5.2.5 There will be 6 related Classes

CLASS A - Saloons and GT's upto 31st Dec '89	The Original 360 Class
CLASS B - Saloons and GT's from Jan '90 to 31st Dec 1999	The Naughty Nineties Class
CLASS C - Roadsports /Production Sports to 31st Dec 1999	The 24/7 class
CLASS D - Cars acceptable but not invited to Goodwood	The "Uninvited Class"

Each Class will be sub divided into engine capacity classes, which will be determined by the actual entries for that class, and those will be announced after closure of entries in order to provide the fairest and most competitive class structure. The resultant engine capacity classes may not be identical within each Main Class category

5.2.6 **INVITATION and CHARITY CLASS (IC Class)**

An invitation and Charity Class will also be available for cars which appear to be in the "Spirit of the race" or whose teams are entering for charitable purposes

An entry to the IC class will only be allowed by acceptance of the entry by the 360MRC management team and subject to this and the following criteria

- The car must run on TREADED tyres regardless
- No invitation class car can win the 360 2 hour outright but will qualify for a best in class award.

Please note. The **SPIRIT OF THE RACE is determined by THE 360 Motor Racing Club management committee and that committee reserve the right to refuse or admit an entry within the Invitation and Charity Class regardless of specification. If you feel that a car should not be allowed in the invitation and Charity class, please deposit £20,000 to the 360 MRC and you may choose the vehicles entering the 360 2 hour race*

There is no upper limit of engine capacity.

5.3 Safety Requirements

5.3.1 All vehicles must be fitted with a full roll cage to a minimum of the current* MSA Competitors Yearbook drawing with door bars mandatory.

5.3.2 All vehicles must comply with the minimum prevailing MSA safety requirements.

5.4 General Requirements

5.4.1 All cars must comply with current* MSA General Technical Regulations and the relevant parts of sections of the current* MSA yearbook except where specified otherwise herein.

5.4.2 Where original parts are demanded by regulation, substitution of those parts by replacement parts may only be done using parts of an identical specification.

5.4.3 Race numbers must conform to MSA Regulation.

5.5 Chassis / Bodywork

5.5.1 Chassis structure and all chassis members should be exactly as per original specification for the production model; however, modifications to lighten the chassis, alter engine, gearbox, axle or suspension location points are allowed subject to 360MRC approval. It is permitted to locally repair and strengthen the chassis.

5.5.2 Bodywork must be relatively as per original specification for the production model with the exception of outer panel material; the original shape and silhouette must be retained and identical whether viewed in plan, elevation, from front or rear. Outer panels may be constructed of alternative material to that of the original equipment, but must be attached to the chassis/bodywork by the original means of fastening where possible.

- 5.5.3 Front and rear bumpers and lip spoilers may be removed or where fitted, if originally specified may be replaced with items of an identical appearance but constructed from an alternative material where genuine original parts are no longer available.
- 5.5.4 Front windscreen must be made of laminated glass. Side windows, quarter lights and rear windscreens may be substituted for an approved alternative material of minimum 4mm thickness.
- 5.5.5 All exterior trim strips and badges may be removed. Wheel arches may be deformed
- 5.5.6 The driver's seat is free subject to MSA requirements and modifications are permitted for the purposes of secure and safe mounting. Other seats may be removed.
- 5.5.7 Interior trim, sound deadening material, carpets etc may be removed.
- 5.5.8 There must be a working means for the windscreen to demist, either by an electric heater and/or fan or electrically-heated windscreen,
- 5.5.9 Steering wheel and instrumentation are free. Steering column anti-theft devices must be removed.
- 5.5.10 Original bonnet and boot fasteners may be removed. Alternative bonnet and boot fixings may be used instead of hinges but the original bodyshape MUST remain All bonnet and boot hinges if retained must operate as per original production. The bonnet and boot shut lines must be as in production. Bonnet and boot lids must be affixed with at least two safety fasteners if hinged and at least four if otherwise. All of which must be clearly indicated by red or contrasting colour arrows..
- 5.5.11 Cars must be equipped with front and rear easily identifiable towing eyes or straps, of sufficient strength for the car to be towed out of a gravel trap.

5.6 Engine

- 5.6.1 The Engine must be located in the original position.
- 5.6.2 The original standard production cylinder block may be used or an alternative manufactured by the same manufacturer to the original production specification including but not limited to material, bore, number of main bearings and number of main bearing fasteners must be used and may be re-bored
- 5.6.3 The cylinder head(s) must be the standard production component or an alternative manufactured by the same manufacturer as the original production component to original production specification including but not limited to material, number of valves, ports and plugs, same plug angle, valve angle/port configuration and operating type and fixes directly onto the original standard production cylinder block without modification.
- 5.6.4 Crankshaft, connecting rod and flywheel material are free. Pistons may be manufactured from aluminium alloy.
- 5.6.5 Camshaft lift and duration are free; Number of camshafts, location and type of actuation must be as original production. Drive system must be as original – i.e. chain or belt.
- 5.6.6 Fuel systems are free with the exception that cars originally fitted with carburetors cannot be replaced with a fuel injection system. Cars fitted with fuel injection systems can be replaced with carburetors
- 5.6.7 Rotary engine cars are permitted and will be classified with an equivalence factor of 2:1
- 5.6.8 Forced Induction is not permitted unless fitted in production. Cars using forced induction where permitted by these regs with four valves per cylinder will be subject to an equivalency factor of 1.7 to 1. Cars using forced induction with two valves per cylinder will be subject to an equivalency factor of 1.4: to 1. Boost pressure must not be adjustable from within the vehicle. Where a turbocharger is permitted by these Regulations it shall be the standard production component and must not be modified save for the fitting of a 360 degree thrust bearing to improve reliability. The boost pressure setting is free. Intercoolers may only be fitted if used in production, must be in the original location and must be the standard production unit.
- 5.6.9 Dry sump systems are prohibited unless per production model... Oil coolers are free, provided they are contained completely within the bodywork.
- 5.6.10 Ignition systems are free; however the original number and type of ignition coil must be retained and the distributor must operate as original, in that it must be the sole means of distributing the spark to the spark plugs.

5.6.11 Exhaust systems are free, subject to MSA requirements and local noise restrictions. **For this race the local noise limit is 105 dB as measured by the approved static method as described in the current* MSA Competitors Yearbook and will be strictly enforced.**

5.6.12 Engines must only use commercially available pump fuel of maximum RON100.

5.7 Gearbox and Axle

5.7.1 Gearboxes are free.

5.7.2 Axles are free. Mechanically operated limited and variable slip differentials are permitted.

5.8 Suspension

5.8.1 Suspension links may be strengthened but must utilise their original geometry and location. McPherson strut top mounts may be adjustable for camber and castor.

5.8.2 Spring rates are free, save for maintaining type and number of springs. Spring platforms may be adjustable.

5.8.3 Dampers are free, save for maintaining original type of operation, i.e. telescopic, lever arm.

5.8.4 Suspension link location may be modified – where rubber bushes were used, solid bushes, rod ends or spherical bearings may be substituted provided the original geometry is not changed.

5.8.5 Anti roll bars may be modified provided the original location points are retained for use. Additional suspension links or bars are prohibited.

5.9 Steering

5.9.1 The original type of steering system must be retained, i.e. steering & idler box, rack & pinion.

5.9.2 Power assisted steering may be added or removed

6.0 Brakes

6.0.1 Dual circuit braking systems operated by one pedal and having a simultaneous effect on both front and rear wheels are mandatory

6.0.2 Master cylinders and callipers are free; Brake ducting is free.

6.0.3 ABS systems are permitted

6.0.4 Cars must have working brake lights fitted that operate without delay when the brake pedal is pushed.

6.1 Fuel Supply System

6.1.1 Fuel tanks and fuel pumps are free, subject to current* MSA requirements. No fuel lines may be located within the passenger compartment unless protected as detailed in the current* MSA Competitors Year Book.

6.1.2 All fuel fillers and connections must be isolated from the passenger compartment by a fuel proof and fireproof bulkhead or enclosure.

6.1.3 Fuel fillers are free subject to their compliance with Sporting Regulation 3.9

6.2 Cooling System

6.2.1 Radiator size and material are free.

6.2.2 Other oil and water cooling systems are free. They must be located completely within the confines of the bodywork and be used solely for the purpose of cooling.

6.3 Electrics

6.3.1 Cars must be equipped with electrical and charging systems of one nominal voltage.

6.3.2 A battery, securely mounted in accordance with current* MSA regulations and contained within a leak proof container, a generator and engine starter motor must all be fitted and operational throughout the duration of the event.

6.3.3 Cars must have working headlights where fitted, tail lights, brake lights and high intensity rain light. They must have at least one working electrically operated windscreen wiper where applicable. Reversing lights if fitted may be disabled.

6.4 Wheels and Tyres

6.4.1 Wheels must be fastened by the original specified method of fixing. 'Centre lock' wheel fixing is allowed where specified as original equipment (this includes factory "works" cars) or an optional extra by the manufacturer. Wheel material must be either steel or aluminium alloy. Wheel fasteners must be manufactured of an appropriate grade of steel.

6.4.2 All cars must only use tyres from MSA current yearbook List 1A or List 1B or any post historic category tyre such as a Dunlop CR 65. for example. **FOR CLARIFICATION PLEASE CONFIRM ACCEPTANCE OF THE TYRE IF NOT ON THE LIST 1A or 1B BY EMAIL techteam@360mrc.com**