

**GOODYEAR  
MSA BRITISH  
OFF ROAD  
CHAMPIONSHIP 2002**

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**REGULATIONS**

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Promoted by **Nationwide 4x4 Ltd** (*Training the Professionals*)

[www.BritishOffRoadChampionship.co.uk](http://www.BritishOffRoadChampionship.co.uk)

# GOODYEAR MSA BRITISH OFF ROAD CHAMPIONSHIP 2002

Organised by

**NATIONWIDE 4x4 Ltd** (*Training the Professionals*)

**Welcome** to the **MSA BRITISH OFF ROAD CHAMPIONSHIP 2002**, this year very kindly sponsored by **GOODYEAR**, and incorporating **FIVE 2 DAY ROUNDS** of **COMPETITIVE SAFARIS** namely:

Rounds	Month	Date	Venue
Round 1	April	20/21	TUNBRIDGE WELLS
Round 2	June	15/16	LEEDS (North)
Round 3	July	27/28	SCOTLAND (Perth)
Round 4	September	14/15	SWINDON
Round 5	October	26/27	GLYNNEATH

The **GOODYEAR MSA BRITISH OFF ROAD CHAMPIONSHIP 2002** will comprise **FIVE 2 DAY COMPETITIVE SAFARIS** with **all** scores to count towards final Championship classification and is open to all registered drivers who **must** register prior to **March 12, 2002**. All drivers will require National A, or higher, Competition Licence, or the EU equivalent.

**Control Tyres:** (See Article 13 1 D 2) You must use Goodyear Wrangler MT/R tyres. Details of participating suppliers will be sent with your acknowledgement of entry.

We, the organisers, will ensure the events will not only be fun but demanding as Selwyn's famous quote "If you don't enjoy it don't do it ". Remember there will be a minimum of 80 stage miles per weekend with the possibility of some events being over 100 miles. So as the Fat Controller says, "Keep Fit & Enjoy yourself!"

***Selwyn Kendrick***

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**P S Visit our web site at [BritishOffRoadChampionship.co.uk](http://BritishOffRoadChampionship.co.uk) for details of ENTRIES and RESULTS**

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# REGULATIONS

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## 1. TITLE and JURISDICTION

**THE GOODYEAR MSA BRITISH OFF ROAD CHAMPIONSHIP 2002** is organised and administered by Nationwide 4x4 Ltd (*Training the Professionals*) in accordance with the General Regulations of the MSA (incorporating the provisions of the International Sporting Code of the FIA) Championship Registration Waiver of Permit No: **2002/....**

## 2. DRIVERS

Drivers must be fully paid up members of an MSA recognised Club and holders of an MSA Rally National A Competition Licence (or its EU equivalent) to be eligible for the **GOODYEAR MSA BRITISH OFF ROAD CHAMPIONSHIP 2002**. They will also have to comply with all the criteria specified in Article 3 - Registration.

## 3. REGISTRATION

**3.1** Completed registration forms will be returned to the Championship Secretary who will issue a championship registration number. The registration fee for the championship will be £400 for the first driver and £100 for each additional driver. These fees include entry into each round of the Championship. Passengers must be at least 16 years old and must produce a valid club membership card of an MSA registered club or valid Licence, issued by the ASN of a member country of the European Union (E2.21.4).

**3.2** Registrations will only be accepted through the post prior to the first round and **close on March 12**. All registration forms must be accompanied by the correct fee. No fees paid are returnable.

**3.3** In order to be eligible for points drivers must register prior to the start of the first event and start all five events.

**3.4** Drivers must sign-on for championship purposes at each event. Championship registration cards will be checked and initialled and a declaration of vehicle eligibility signed. No registered driver can also be registered as a passenger.

**3.5** Once a driver has registered for the championship it is not possible to de-register. i.e. even if he or she removes his or her decals and therefore disqualifies him or herself from points scoring, when championship points are calculated he or she will still be counted as a "live" competitor even though he or she is not being allocated points.

**3.6** Up to three drivers may register to share the driving of a competing vehicle. All Championship paperwork will be sent to the 1<sup>st</sup> registered driver

## 4. DECALS

Drivers in the championship must provide their own numbers regulation size **23cm** high displayed on a white background on both sides of the vehicle above the waistline. In addition each competitor shall make available a clear space at least **450mm** in width **by 125** mm in height above and below the identification numbers for sponsors / organisers advertising material to be displayed. Championship decals must be carried whilst competing otherwise points will not be allocated for that event.

## 5. ENTRIES

**5.1** It is the Driver's responsibility to obtain entry forms in adequate time.

**5.2** No entry will be accepted without a fully completed Entry Form.

## 6. CHAMPIONSHIP ADMINISTRATION

**6.1** The Team comprises Selwyn Kendrick and Peter Head, Lynda Head, Terry Day, Andy Mills, Henry Webster, Chris Tomley and Wendy Tomley who will be responsible for the administration of the championship rules.

**6.2** The Panel of Stewards for the championship will be Dave Lucas, Jim Molay (who will act as Chairman) and Chris Hill. Any appeal against any decision of the Team must be made to the Panel of Stewards in accordance with section O 6 of the 2002 MSA Yearbook.

## 7. CHAMPIONSHIP CONTACTS

Championship Secretary:

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Championship PR:

**WENDY TOMLEY,**  
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Eligibility Scrutineer :

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Mariven, 82 Little Green Lane, CHERTSEY, Surrey, KT16 9PY.  
(H) 01932 563216 (M) 07836 317 779

## 8. TIES

In the event of ties the following will be used in order:

- 8.1 greater number of wins overall
- 8.2 greater number of highest placings overall
- 8.3 greater number of class wins.
- 8.4 greater number of Drivers beaten over all scoring events.
- 8.5 the highest position overall at the last event.

## 9. CHAMPIONSHIP EVENTS

The championship will consist of the events detailed at the beginning of these Regulations. Should any event be cancelled, at least two months notice will be given of a replacement event. Should it not be possible to find an alternative event the championship will continue with fewer rounds.

## 10. POINTS

10.1 These will be allocated in respect of (a) overall positions and (b) class positions and will be allocated to the vehicle based on finish positions. No overall or class points are transferable.

10.2 The number of points which will be awarded is as follows:-

1 <sup>st</sup> Overall	75
2 <sup>nd</sup>	70
3 <sup>rd</sup>	65
4 <sup>th</sup>	60
5 <sup>th</sup>	59
6 <sup>th</sup>	58

and so on. This will be based on the registered drivers listed in the final results. These will be called "Overall points".

1st registered driver receives	75 points,
10th registered driver receives	54 points,
20th registered driver receives	44 points.
63rd registered driver receives	1 point.

10.3 The number of points which will be awarded to the first placed driver in each class is **10** and the next highest placed will receive **9** and so on. This will be based on the registered drivers listed in the final results. These will be called "Class points".

1st registered driver receives	10 points,
10th registered driver receives	1 point.

10.4 In addition all vehicles receive 1 point for starting the event ("Starting points").

10.5 To ascertain final placings in the Championship a driver will add together:-

- 10.5.1 Overall points
- 10.5.2 Class points
- 10.5.3 Starting points

e.g. A driver who is 1st overall & 1st in class has the following points in the first round:

Overall points	75
Class points	10
Starting points	01
Total	86

A driver who is 5th overall and 3rd in class has the following points in the first round:

Overall points	59
Class points	08
Starting points	01
Total	68

10.6 It is the Driver's responsibility to protest (if necessary) the championship points within 10 days of publication of the championship results after each event and the final championship points at the close of the season, within 10 days of the date of posting or e-mailing such results to all Drivers, as defined by the Championship Secretary's records.

## 11. AWARDS

11.1 It is hoped that Championship awards will be presented at the 2002 National Hillrally Championship dinner which will be held at a venue in the Birmingham area on Friday 10 January 2003. Special deals will be available for accommodation. Details will be published later in 2002.

11.2 The following awards will be presented:

**OVERALL – GOODYEAR MSA BRITISH OFF ROAD CHAMPIONSHIP**

- 1st driver A Trophy
- 2nd driver A Trophy
- 3rd driver A Trophy

**In order to be eligible for the above awards Drivers will need to count 5 scores.** The above Drivers will not be eligible for class awards.

**CLASS**

- 1st in class
- 2nd in class )
- 3rd in class )(subject to 8 registered vehicles)

**DIESELS**

- 1<sup>st</sup> in each Group

11.3 **In order to be eligible for class awards Drivers must have started all championship events and finished at least one.**

11.4 Additional awards may be presented at the Organisers' discretion.

11.5 No person can win more than one award.

11.6 No classes will be amalgamated in this Championship.

**NOTE:** All award winners **MUST** be present at the Awards Presentation. Non-appearance will result in the forfeiture of awards. All MSA Trophies remain the property of the MSA and **MUST** be returned when requested, in their original condition.

**12. ELIGIBLE CARS**

12.1 Groups 1, 2 & 3 of the Championship are open to 4 x 4 vehicles, whether designed principally for the transportation of passengers, commercial use or dual purpose. Saloon cars and car-derived commercial vehicles are prohibited in Groups 1, 2 & 3. Group 4 includes 2 wheel drive vehicles and their technical regulations are contained in Regulation 13.4. All vehicles must comply with MSA Regulations, in particular E12 and H36 as appropriate.

12.2 Drivers will be required to vouch that the vehicle entered complies with the Regulations in all aspects, this declaration will be on the initial registration form and on a registration form at each event.

12.3 Eligibility scrutineers will be appointed to the Championship. Any vehicle which has been / is being used in the Championship, could at any time, for reasons of eligibility, be stripped or sealed for examination. All costs of stripping and rebuilding will be borne by the Driver/s. Failure to agree to stripping / sealing or breaking a seal will result in the loss of points throughout the year, or a penalty decided by the Stewards of the Championship.

12.4 To make provision for scrutineers' wire seals, every engine must have available 1/16th diameter holes pre-drilled in readily accessible locations on installed sections as follows:-

- 12.4.1 sump: cross drill holes through retaining screws or studs.
- 12.4.2 Rocker / cam cover or head studs: cross drill holes through two retaining studs or screws.

If no sealing holes are available, the engine may be checked straight away.

**13. CLASSES will be as follows:-**

Group	Class	Capacity	Quick Guide to Permitted Modifications
1 Production	A	< 2500	Additional gauges, front seats, springs and shock absorbers except their standard location must be retained, air filter elements, brake friction materials, wheels, tyres, additional spare wheel, auxiliary lights, under body protection.  For full details see Class Regulations at Article 13.1

	B	> 2500	
2 Modified Production	C	< 2500	Must retain original vehicle silhouette, but may fit additional shock absorbers, modified suspension, non-standard engine & gearbox.
	D	> 2500	For full details see Class Regulations at Article 13.2 This Group is suitable for T 2 vehicles.
3 Prototype	E	< 3000	All modifications permitted but vehicles must comply with MSA Technical Regulations 2000 Sections E12 and H36.
	F	3000-3599	Differential gears are free.
	G	3600-4000	For full details see Class Regulations at Article 13.3
	H	> 4000	This Group is suitable for T 3 vehicles.
4 Two wheel drive	J	All capacities	This Group includes all types of 2 wheel drive vehicles which can comply with the Technical Regulations in Regulation 13.3.

### 13.1 GROUP 1 - PRODUCTION

A Production vehicle is defined as a 4WD model having been produced in quantities of not less than 500 per annum, regardless of engine capacity. It must have been available through a dealer network, when new, and must be to standard European specification, as detailed in the vehicle's handbook. It is the Driver's responsibility to provide evidence if required, of the vehicle's eligibility.

No modifications not expressly authorised hereafter, save those necessary to comply with safety regulations, may be made to the vehicle.

#### A ENGINE

- 1 The accelerator cable may be replaced or doubled, with or without parts from the original manufacturer.
- 2 The make and type of spark plugs are free, as are rev limiters and high tension cables and the ignition coil, where fitted.
- 3 The capacity and origin of the cooling system radiator/tank is free, as is the type of thermostat which may be removed. The original location and attachment points of the series production radiator must be retained.
- 4 Those parts of a carburettor or fuel injection system which regulate the admission of fuel to the engine may be modified, provided that the modification has no influence on the admission of air. The original fuel injection system must be retained, the injectors may be changed for injectors which are identical except for the size of the pintel nozzle hole at the end.
- 5 The air filter, its housing and the tube between this housing and the atmosphere are free, but the housing must remain in its original location, the air must not be taken from the cockpit, modifications must not affect the structure of the car, and the installation must be situated entirely within the engine compartment. The air filter element may be removed.
- 6 The valve springs and valve clearance are free, but the camshafts (including their profile) must remain as original.
- 7 The fuel pump is free, in operating principle, number and location outside of the cockpit.
- 8 The material of the engine mountings are free, but the number and location must remain as original.
- 9 The exhaust system after the first silencer is free, except that it may not be replaced with a system of a larger diameter than that fitted upstream of the first silencer. The exhaust system must retain the original number of silencers, although additional silencers may be fitted. It shall be permissible to alter the exit point of the exhaust system either to the rear or sides of the vehicle provided that no alteration to the bodywork is made and the installation respects Construction and Use Regulations. Additional mounting points for the exhaust system may be fitted.
- 10 Where fitted the Cruising Speed Controller may be disconnected.
- 11 Sound proofing panels may be removed.

#### B TRANSMISSION

- 1 The clutch disc is free, including its weight, except for the number of discs and their diameter.
- 2 Standard transmission ratios must be retained. Optional extras are prohibited.
- 3 Locking and limited slip differentials or traction control devices are only permitted if available as a standard fitment.

#### C SUSPENSION

1 **SPRINGS**

(a) **Coil Springs.** The length, diameters external and of the wire, the form of the spring platform and the type of spring (progressive or fixed rate) are free.

(b) **Leaf Springs.** The length, width, thickness, vertical curvature and number of leaves are free.  
The fitting of shackle protection pads is strongly recommended.

2 **TORSION BARS**

The diameter is free.

3 **SHOCK ABSORBERS**

(a) Are free, but the type telescopic, lever etc., and operating principles (hydraulic, friction, etc.) must be retained as original.

(b) Gas filled Shock Absorbers will be regarded as hydraulic in respect of their operating principle.

(c) The mountings must be retained as originally fitted and may not be reinforced.

(d) It shall be permitted to fit an additional shock absorber at each wheel station, provided that the mounting's only purpose is the fitting of the additional shock absorber.

(e) The fluid tanks for the shock absorber may be attached in the wheel arches as well as to the chassis.

(f) Suspension travel straps are permitted.

4 **RIGID AXLE**

Where fitted, the original casing may be strengthened provided the original part can still be recognised.

**D WHEELS AND TYRES**

1 Wheels are free provided that the tyres remain covered by the original bodywork, including wheel arch extensions where originally fitted, and where no modifications may be made to the bodywork to permit their fitting.

2 Studded tyres are prohibited. All competitors shall use the control tyres being Goodyear Wrangler MT/R.

3 The spare wheel may be relocated inside the vehicle provided that it is securely restrained and does not impinge on the space reserved for the crew.

4 Wheel fittings by bolts may be changed to pin and nut fittings.

**E BRAKING SYSTEM**

1 The brake linings are free as is their mounting to the backing plate (riveted, bonded etc.) provided that the contact surface of the brakes is not increased.

2 Protection plates may be removed or reshaped.

3 In the case of a car fitted with servo-assisted brakes or an anti-locking device, this device may be disconnected.

4 Brake hoses may be changed for aviation type lines.

**F BODYWORK**

1 **Exterior**

(a) Hubcaps must be removed.

(b) Protective headlight covers may be fitted provided that their only function is to cover the glass, and they have no influence on the car's aerodynamics.

(c) The fitting of under body protection plates is recommended provided that their only function is to protect the following parts:- engine, radiator, suspension, gearbox, tank, transmission and exhaust.

(d) A nudge bar may be fitted, in addition to the bumper, and must be independent of and not reinforce the car's structure or contribute to its rigidification. This bar must be made of tubes and may be mounted to the original bumper or chassis and may only be so constructed so as to provide protection to the headlights and provide mountings for auxiliary lights.

(e) The side and rear windows behind the driver may be replaced with non-transparent material or transparent material of at least 3mm in thickness. Openings originally made up of a number of panes may be replaced with a single pane or panel. The fixation and mechanisms of these windows and those of the windows in the side doors are free.

(f) The glass panel of the sunroof must be replaced with a panel of the same material as the roof of the car and must be at least 1.5 mm.

(g) The locking system for the cap of the fuel tank is free.

(h) Where an externally mounted spare wheel is relocated inside the vehicle it shall be permitted to remove the original external wheel mounting.

(i) External rear view mirrors, and front and rear windscreen wiper blades are free.

(j) Only electric winches which require no modification to the structure of the car other than to facilitate the attaching of the winch by bolts may be fitted.

2 **Interior**

(a) All accessories which have no effect on the car's behaviour are allowed without restrictions, such as those concerning the aesthetics or interior comfort (lighting, heating etc.) on the express condition that they do not influence, even in a secondary manner, the efficiency of the

engine, steering, strength, transmission, braking or road holding.

- (b) All the passenger seats, if occupied, must be fitted with head restraints.
- (c) The carpet behind the front seats may be removed when an FT3 tank is fitted in that area.
- (d) All the controls must be those provided by the manufacturer and they must retain their original function, but may be modified to improve their ease of use (extension to handbrake lever, additional flange to brake pedal, etc.).  
The following are allowed in particular:
  - (i) Additional measuring instruments, counters etc. May be freely installed provided that they do not present a danger.
  - (ii) The horn may be changed, and an additional one fitted which may be operated by the passenger.
  - (iii) The mechanism of the handbrake lever may be modified to fly-off operation.
  - (iv) The seats occupied by the crew are free, and the seat supports may be strengthened.
  - (v) Additional storage compartments may be added to the glove compartment and front doors.
  - (vi) The steering wheel is free.
  - (vii) Electric window mechanisms may be converted to manual operation.

## **G REINFORCEMENTS**

- 1 Strengthening of suspended parts is permitted where the strengthening material follows the shape and is in contact with the suspended part.
- 2 It is permitted to fit strengthening bars to the suspension points on the bodyshell or spring mounting points, provided that the bars are attached by bolts and are removable. It is permitted to make holes in the suspension trim to attach the bars.
- 3 When the spare wheel is originally located within an enclosed space it shall be permissible, when carrying a wheel wider than that originally fitted, to remove the cover and or sufficient material to allow the wider wheel to be carried within the space provided.

## **H ELECTRICAL SYSTEM**

- 1 The battery and associated cables are free, save that the battery must be located in its original position using the original mountings.
- 2 The Alternator is free.
- 3 Fuses may be added to the electrical system.
- 4 A maximum of 2 auxiliary forward facing lights, and their associated relays etc. may be fitted, but which may not be fitted within the bodywork. Additional reversing lights may be fitted which may only be operated when reverse gear is engaged. In all other respects the lighting system must respect current legislation.

## **I FUEL SYSTEM**

Where an FT3 tank is fitted fuel lines must be replaced with the aviation type. Where the original fuel tank is retained it is permitted to change the fuel lines to the aviation type. It is further permitted to feed the original tank from the FT3 tank provided that the breather pipe passes through the FT3 tank. In all cases the routing of fuel lines are free except that they may not be routed inside the roll cage or chassis members.

## **J JACK**

The jack is free and the jacking points may be changed for others which have no other function.

## **13.2 GROUP 2 - MODIFIED PRODUCTION**

A Modified Production vehicle is defined as a 4WD model having been produced in quantities of not less than 500 per annum, regardless of engine capacity. It must have been available through a dealer network, when new, and must be to standard European specification, as detailed in the vehicle's handbook. It is the Driver's responsibility to provide evidence if required, of the vehicle's eligibility.

All modifications authorised for Production Cars are permitted for Modified Production Cars together with those contained in these specific regulations.

No modifications not expressly authorised hereafter, save those necessary to comply with safety regulations, may be made to the vehicle.

## **A GENERAL PRESCRIPTIONS**

- 1 With the exception of those parts hereafter authorised for modification [or], replacement, all other parts may be machined, balanced and/or chemically treated provided that it is possible to identify those parts so modified as being originally fitted components, irrespective of the supplier.
- 2 Throughout the car all nuts and bolts/screws are free, as are the type of locking device (i.e., washer, locknut etc.).

## **B ENGINE**

1 The engine must originate from the base car or from a car from the same make. The engine must be in its complete and integral form save for modifications authorised hereafter.

2 The nominal capacity of the engines shall be limited to:

**(a) Petrol Engines:**

5,000cc for normally aspirated 2 valves per cylinder engines.

3,500cc for engines with more than 2 valves per cylinder and/or forced induction.

**(b) Diesel Engines:**

6,000cc for normally aspirated 2 valve per cylinder engines.

4,000cc for engines with more than 2 valves per cylinder and/or forced induction.

**(c) Cylinder block - Cylinder head**

1. It is permitted to close the unused apertures in the cylinder block and cylinder head provided that the only purpose is that of closing the aperture.

2. A rebore is allowed provided the original cylinder block is retained, resleeving of the bore is allowed under the same conditions and the material of the sleeve is free.

3. Planing of the cylinder block and head is allowed. In the case of rotary engines the dimensions of the inlet and exhaust tracts are free provided that the original dimensions of the inlet and exhaust ports are respected.

4. The Compression Ratio is free.

5. The Cylinder Head Gasket is free.

6. The Pistons, Piston Rings and Gudgeon Pins are free.

7. The Connecting Rods and Crankshaft. In addition to the modifications permitted in the paragraph 'General Prescriptions', the original crankshaft and connecting rods may receive chemical, heat or mechanical treatment different from that specified for production parts.

8. Bearings: These are free except that they must be the original type of bearings and they must be to the original dimensions.

9. The Flywheel may be modified in accordance with the prescriptions of the paragraph 'General Prescriptions' provided that the original flywheel can still be identified.

**(d) Fuel and Air Feed**

1. The air filter, its housing and the plenum chamber are free. The air filter and box may be removed, replaced by another or relocated within the engine compartment. The pipe between the air filter box and the carburettor(s) or the air measuring device (injection) is free, as is the pipe between the air measuring pipe and the inlet manifold or the super charging device.

2. The air filter may be fitted with a grille.

3. Anti pollution parts may be removed provided that their removal does not lead to an increase in the amount of air admitted to the engine. It is permitted to make a hole, of a maximum diameter of 10cm in the engine cover or bonnet to provide air to the engine and to connect a pipe of a maximum internal diameter of 10cm to this hole.

4. The Fuel pumps are free except that they may not be fitted inside the cockpit unless they were originally located in this position in which case they must be adequately protected.

5. It is permitted to fit a radiator in the fuel circuit.

6. Fuel filters are free except that they shall not exceed a unit capacity of 0.5 litre and may be added to the fuel circuit.

7. The original heat exchangers and intercoolers to the petrol engine fitted must be retained and remain in their original location. In the case of diesel engines these are free but must remain within the engine compartment and the bodywork must not be modified to allow their fitting.

8. The pipes between the supercharging device, the intercooler and the manifold are free but their only function may be to carry air.

9. Water injection, if fitted, must be as originally fitted to the engine type in all respects.

10. The use of any other substance or device to reduce the temperature of the mixture is forbidden.

**(e) Carburettor**

The replacement of the standard carburettor with a single progressive single or twin choke carburettor is permitted provided, in the case of a single choke carburettor, the area of the single choke does not exceed 2 inches or 50.80mm and, in the case of a twin choke carburettor, the area of each choke does not exceed 1.4145 inches or 35.93mm. If an SU carburettor is used, the size of the choke will be the size of the butterfly flap for the purpose of the above measurements

**(f) Injection**

1. The injection system original to the vehicle must be retained in type and location. The parts of the injection system regulating the quantity of fuel admitted to the engine may be modified, but not the diameter of the opening of the butterfly.

2. The air measuring device is free.

3. The injectors are free, except for their number, position, assembly axis and operating principle.

4. The fuel lines feeding the injectors are free.

5. The electronic box is free provided it does not incorporate more data.

6. The fuel pressure regulator is free. In the case of a diesel engine the injection pump is free.

**(g) Restrictor (supercharged engines only)**

1. The restrictor shall be of a maximum diameter of 34mm for petrol engines and 40mm for diesel engines and shall comply fully with FIA Appendix J requirements.
2. In the case of engines with two parallel compressors the maximum diameter will be 24mm for petrol engines and 28.2mm for diesel engines.

**(h) Camshafts**

The camshafts are free except their number and number of bearings. The timing is free. The material, type and dimensions of pulleys, chains and belts for driving the camshafts are free. The route, and the number of belts or chains are free, as are the guides and tensioners associated with the belts or chains.

**(i) Valves**

The material and the shape of the valves are free, as is the valve lift, but their original dimensions must be maintained. The cups, cotters or guides (even where not originally specified) are free. Shims may be added under the springs. The valve seat material is free. The valve springs are free as to number, material, length and number of coils, but their location must be as original.

**(j) Rocker Arm and Tappets, Push Rods**

Rocker arms may only be modified as prescribed in the General Conditions. The Tappets and Push Rods are free provided that they are interchangeable with the original parts.

**(k) Ignition**

The ignition system is free except that the number of spark plugs may not be increased. It is permitted to convert a mechanical ignition to electronic ignition system and vice a versa. Where the system is so converted only those modifications to fit the necessary components are permitted.

**(l) Cooling**

The radiator is free, as are its mountings provided that it remains in its original location (compartment). The cooling hoses and fittings are free. A radiator screen may be fitted. The type, location, material and number of fans are free. The thermostat is free and may be removed. A water catch tank may be fitted and the radiator cap may be locked. The expansion tank is free, and one may be added where not originally fitted. If water injection was originally fitted it may be disconnected but not removed.

**(m) Lubrication**

1. Radiator, oil/water heat exchanger, lines, thermostat, sump, oil pump and filter are free. The oil radiators must be located within the original parameters of the car, including the underneath of the car. Fitting of an oil radiator does not allow the fitting of an enveloping aerodynamic structure. All air openings must have the sole effect of inducing the necessary air for the cooling of the radiator, and must not have any aerodynamic effect.
2. Oil pressure may be increased.
3. If the lubrication system includes an open type breather then it must be equipped with an oil catch tank into which the oil will flow. This catch tank shall be at least 2 litres for cars up to 2,000cc, and at least 3 litres for cars of 2,000cc and above.

**(n) Engine Mountings**

Mountings are free provided that the position of the engine respects the original layout (longitudinal, transverse), and that the engine remains in its original half of the wheel base. The only possible modifications to this compartment are those made necessary by the difference in space requirement between the original engine and the permitted alternative engine. The incline may be modified. Supports may be welded to the engine and to the bodywork and their position is free. It is permitted to modify the bulkhead for the installation of one or more air filters or for the admission of air provided that this arrangement is totally isolated from the admission of air into the cockpit.

**(o) Exhaust**

1. Downstream of the original exhaust exit the system is free except that the exit must remain inside the car's perimeter. For cars with turbochargers the exhaust can only be modified after the turbocharger. In the case of rotary engines, provided the inlet ports of the exhaust manifold are respected, the dimensions of the ducts are free.
2. Thermal screens may be fitted to the exhaust manifold, the turbocharger, and the exhaust system provided their only function is that of a thermal screen.
3. Driving pulleys and belts for ancillaries situated outside the engine:  
The material, dimensions and type of pulleys are free, chains and belts for driving the ancillaries are free. The route and the number of belts and chains are free.

**(p) Gaskets** Gaskets are free.

**(q) Engine Springs**

Springs are not subject to any restrictions other than that they must retain their original operating principle.

**(r) Starter Motor**

The Starter Motor must be retained, but its make and type are free.

**(s) Supercharging Pressure**

The pressure may be modified under the 'General Prescriptions' and 'Engine springs' as specified above. The connection between the housing and the waste gate may be made adjustable if it is not originally so. The original system of operation of the waste gate may be modified and may be rendered adjustable, but the system must be retained. A mechanical system must remain mechanical, and an electrical system must remain electrical etc.

## **C TRANSMISSION**

1 **Clutch** The Clutch is free.

2 **Gearbox, transfer box, final drives, differentials and their casings:**

These are free. An additional lubrication and cooling device is allowed (circulation pump, radiator, and air intakes situated under the car) in accordance with the prescriptions listed under Lubrication above. The gear box supports and drive shafts are free.

## **D SUSPENSION**

1. The suspension is free. The axles are free and may be substituted. Reinforcement bars may be fitted to the suspension mounting points. The distance between the fixing point of the suspension and the anchorage point of the reinforcement bar must not be more than 100mm, unless the bar is a transversal strut with a roll bar as originally fitted, and unless there is an upper bar fixed to a MacPherson suspension or similar. In the latter case the maximum distance between the anchorage point of the bar and the upper articulation point will be 150mm.
2. Apart from these two points, this bar must not be mounted on the bodyshell or the mechanical parts. One and the same bar may only be fixed to 2 of these points situated on the original chassis (bodyshell).

## **E WHEELS AND TYRES**

Wheels are free except for the following:

- 1 The maximum diameter of the tyre may not exceed 810mm.
- 2 The use of tyres intended for motorcycles is not permitted.
- 3 The wheels may be increased or decreased in diameter by 2 inches from the original specification.
- 4 The wheels do not have to be of the same diameter.
- 5 Wheel fixing bolts may be exchanged for studs and nuts or vice versa.
- 6 Should the wheel be secured by a central nut, a safety spring must be in place at all times, painted dayglo red and these safety springs must be changed every time the wheel is changed. Spare springs must be carried at all times.
- 7 The wheel and tyre must be housed within the original bodywork including original wing extensions.

**Tyres are restricted – see 13.1 D 2**

## **F BRAKES**

Brakes are free except for the following:

Cooling of brakes. Only one flexible pipe to bring air to the brakes of each wheel is allowed, but its inside section must be able to fit within a circle with a 10cm diameter. The air pipes must not extend beyond the parameters of the vehicle when viewed from above.

## **G STEERING**

The steering is free, including the housing, however the original operating principle must be retained.

## **H BODYWORK AND CHASSIS**

- 1 Modifications to the bodyshell and chassis made necessary to allow for modifications authorised above are allowed. Fixed bulkheads may be rendered movable on condition that this does not modify their ability to prevent the passage of liquids and flame.
- 2 Strengthening of the sprung parts of the chassis and bodywork is allowed provided that the material used follows the original shape and is in contact with it. Reinforcements by composite materials are allowed irrespective of thickness.
- 3 Insulation material may be removed from the bodyshell and chassis.
- 4 Unused supports (i.e. spare wheel carrier) may be removed.

## **I EXTERIOR**

- 1 The external contours and shapes of the car must be conserved in their entirety, except as permitted below:
  - (a) Bumpers, roo-bars: materials are free but the original shape and attachment points must be retained. A roo-bar may be fitted provided that it is entirely made of tubes and that it is mounted to the bumper. Its only function may be the protection of and mounting of auxiliary lights.
  - (b) Hub caps and wheel embellishers: must be removed.
  - (c) Windscreen wipers: The system is free in all respects save that it must comply with Construction and Use requirements. The washer reservoir may be relocated inside the cockpit, the number and capacity are free.
  - (d) External decorative/rubbing strips may be removed.
  - (e) Jacking points are free as to type, location and number but must have no other function.
  - (f) Light covers may be fitted provided their only function is protection and that they have no aerodynamic effect.
  - (g) The location and type of registration plates are free provided that they comply with Construction and Use requirements.

- (h) Additional safety fastenings for the windscreen and other windows may be fitted provided that they do not improve the aerodynamics of the car.
- (i) Under vehicle protection may be fitted to protect the engine, radiator, suspension, transmission, fuel tank and exhaust. These parts may have no other function than the protection of those specified parts.
- (j) Wing extensions may be fitted, covering at least one third of the tyre's circumference, and being no greater than 5cm wide and 10cm tall in section. It is permitted to fit plastic protection parts inside the wings and the edges of the wing panel may be folded back if they protrude inside the wheel housing.
- (k) Removable pneumatic jacks are permitted.
- (l) Skirts are prohibited. No parts may be fitted between the sprung part of the car and the ground whose function is to fill this space.
- (m) It is permissible to remove or replace existing supports between the body and chassis, but is not permitted to change or add locations.
- (n) The materials of the doors, bonnets and boot lids, handles and hinges are free, provided that their external appearance and operation is retained.
- (o) The material and operation of the front lateral windows are free. The windows must be transparent and at least 3mm thick.

## **J COCKPIT**

- 1 No mechanical parts may protrude into the cockpit. Modifications to the cockpit must not be dangerous for the occupants of the vehicle especially in the event of a crash.
- 2 The dashboard is free but must not have any protruding parts.

## **K SEATS**

- 1 The front seats are free and may be replaced, they may be relocated rearwards but the seat back shall not be behind a vertical line defined by the leading edge of the rear seat as originally fitted. Rear seats and parcel shelves/load area covers may be removed.
- 2 All padding and insulation material may be removed from the underside of the roof.
- 3 Insulating and padding may be removed from the floor, the carpets are free and maybe removed. All other padding and insulation may be removed from the car.
- 4 The heating system is free and may be removed. Where the system is removed an electric demisting system or similar must be fitted. Air conditioning may be disconnected or removed.
- 5 The steering wheel is free and the steering lock may be removed.
- 6 It is permitted to install a ventilation flap in the roof in accordance with the following conditions:
  - (a) maximum height 10cm.
  - (b) displacement within front third of roof area.
  - (c) hinges on the rear edge.
  - (d) maximum width of 50cm.

## **L ADDITIONAL ACCESSORIES**

All those which have no influence on the car's behaviour, power or performance are allowed. All controls must retain their intended function and may be adapted for ease of use and accessibility. All gauges and measuring devices are free and may be added or deleted. However a speedometer must be fitted. The horn may be added to and changed. Circuit breakers are free as to number and location. The original windscreen may be replaced with a laminated windscreen with an integral defrosting device fitted. A fly-off handbrake mechanism may be fitted. Spare wheels must be securely fitted and must not intrude on the space reserved for the crew members. No external bodywork modifications may result from the spare wheel's installation. Additional compartments may be added to the glove compartment and pockets added to the doors. Additional insulation to protect the vehicle's crew from fire may be added to the bulkheads. The joints in the gear linkages may be changed.

## **M ELECTRICAL SYSTEM**

- 1 The nominal voltage of the original system must be retained.
- 2 The wiring harness & fuses are free as are the routing and location of the same.
- 3 The battery(ies) are free but must be securely fitted and covered to avoid leaks and short circuits. The original number of batteries must be retained. Where the battery is relocated it must be attached to the body using a metal sheet and two metal clamps fixed to the floor by nuts and bolts of 10mm diameter, with 3mm thick reinforcements at the securing holes of 20cm<sup>2</sup>. The battery must be covered by a leak proof box and where installed behind the front seats within the cockpit the box must be ventilated to the exterior of the vehicle.
- 4 The generator is free but must retain the original drive system. Its location is free and may only be located inside the cockpit if that was the original location.

## **N LIGHTING**

The car's lighting must respect the lighting requirements of the current Motor Vehicles' Lighting Regulations. Apart from that requirement the lighting systems are free and the location of the indicators and parking lights

may be modified. Where this is done the original orifices must be sealed. Additional or alternative reversing lights may be fitted and may be incorporated into the bodywork but may only be illuminated upon the engagement of reverse gear. The fitting of additional forward facing lights may be subject to restriction by event supplementary regulations.

### 13.3 GROUP 3 - PROTOTYPES

Prototype vehicles are defined as cars which are free as to origin and design.

#### **A ENGINE**

The engine is free as to its type and its location.

#### **B TRANSMISSION**

The Transmission is free including the gearbox, transfer box, differentials and axles, as to the type and location.

#### **C SUSPENSION**

The suspension is free as to its type and location.

#### **D BRAKES**

The brakes are free, but a handbrake must be fitted.

#### **E STEERING**

The Steering is free but must be a mechanical system, power assistance is permitted.

#### **F WHEELS AND TYRES**

1 Wheels are free.

2 Where the wheel is secured by a central nut this must be fitted with a safety spring painted dayglo red at all times. This spring must be replaced after each wheel change and spares must be carried within the vehicle.

3 Tyres are restricted – see 13.1 D 2

#### **G CHASSIS**

The chassis is free. Jacking points may be added as necessary and their type is free.

#### **H BODYWORK**

The materials and design of the bodywork are free but must respect the general prescriptions of the MSA. A laminated windscreen with an integral defrosting system may be fitted. A demisting system and a windscreen wiper/ washer system must be fitted. Where front lateral windows are fitted they shall be of a transparent material not less than 3mm thick. A roo-bar of tubular construction may be fitted to the chassis provided its only function is the protection and mounting of auxiliary lights.

#### **I COCKPIT**

1 No mechanical parts may protrude into the cockpit. Fixtures and fittings within the cockpit must not be dangerous for the occupants of the vehicle especially in the event of a crash.

2 The dashboard is free but must not have any protruding parts.

3 The heating system is free.

4 The steering wheel is free and the steering lock may be removed.

5 It is permitted to install a ventilation flap in the roof in accordance with the following conditions:

- (a) maximum height 10cm
- (b) displacement within front third of roof area
- (c) hinges on the rear edge
- (d) maximum width of 50cm

#### **J ADDITIONAL ACCESSORIES**

All those which have no influence on the car's behaviour, power or performance are allowed. All controls must retain their intended function and may be adapted for ease of use and accessibility. All gauges and measuring devices are free and may be added or deleted. At least one horn must be fitted. Circuit breakers are free as to number and location. A fly-off handbrake mechanism may be fitted. Spare wheels must be securely fitted and must not intrude on the space reserved for the crew members. Insulation to protect the vehicle's crew from fire may be added to the bulkheads.

#### **K ELECTRICAL SYSTEM**

1 The nominal voltage of the system is free.

2 The wiring harness & fuses are free as are the routing and location of the same.

3 The battery(ies) are free but must be securely fitted and covered to avoid leaks and short circuits. The original number of batteries must be retained. Where the battery is relocated it must be attached to the body using a metal sheet and two metal clamps fixed to the floor by nuts and bolts of 10mm diameter, with 3mm thick reinforcements at the securing holes of 20cm<sup>2</sup>. The battery must be covered by a leak proof box and where installed behind the front seats within the cockpit the box must be ventilated to the exterior of the vehicle.

4 The generator is free but it may not be located within the cockpit.

#### **L LIGHTING**

Two red warning lights must be fitted to the specification of Q5 in accordance with H36.12.1 Apart from that requirement the lighting systems are free and the location of the indicators and parking lights may be modified. Where this is done the original orifices must be sealed. Additional or alternative reversing lights may be fitted and may be

incorporated into the bodywork but may only be illuminated upon the engagement of reverse gear. The fitting of additional forward facing lights may be subject to restriction by event supplementary regulations.

**14. AMALGAMATION OF CLASSES**

If, by the end of signing-on prior to the first round of the Championship, any class has less than five entries, the Organisers will not amalgamate classes but may reduce the awards list as deemed appropriate in respect of this Championship. Similarly, if there shall be a very large entry in any one class, the Organisers reserve the right to sub-divide that class into two or more new classes.

With the exception of diesel engined vehicles for any vehicle with forced induction, the actual capacity will be multiplied by 1.7 to achieve a notional capacity and this notional capacity shall determine the class. (E 13.4.1)

**15. ACKNOWLEDGEMENTS** The Organisers wish to thank:-

**Goodyear**

**Co-ordSport Ltd**

**Ford Motor Company SVO**

**Konica Peter Llewelyn Ltd**

# Entry Form

No: \_\_\_\_\_

*Type or Block Capitals throughout please!*

(For official use only)

DETAILS		1 <sup>st</sup> DRIVER	2 <sup>nd</sup> DRIVER	3rd DRIVER
Surname:				
Forenames:				
Address:				
Post Code:				
Age		yrs	yrs	yrs
Occupation:				
Phone	Day			
	Evening			
	Mobile			
Fax:				
E-mail *				
<b>NEXT OF KIN</b>				
Telephone Number:				
Address:				

**N.B. CORRESPONDENCE will be sent to 1<sup>st</sup> Driver**

\* If you will accept correspondence by e-mail, please confirm you have **WORD**  and **EXCEL**  or want **RTF**   
 If you need another format, please specify: .....

## VEHICLE

Make		Model		Capacity	
Spring type		Class		Reg No	
Fuel	Petrol / Diesel / LPG	Forced Induction	YES / NO	Colour/s	

## FEES

GOODYEAR MSA BRITISH OFF ROAD CHAMPIONSHIP ENTRY FEE	1st driver	£ 300
	Each additional driver -	£100
<b>GRAND TOTAL</b>		<b>£</b>

**N.B.** Please make all cheques payable to **Marches 4x4 Motorsport Management Ltd**

# Media and Commentary Information

*Type or Block Capitals throughout please!*

*THIS FORM MUST BE COMPLETED ACCURATELY*

	1 <sup>st</sup> DRIVER	2 <sup>nd</sup> DRIVER	3rd DRIVER
<b>No. of children &amp; ages</b>			
<b>How long off-roading</b>			
<b>Member of which Off Road or Motor Clubs</b>			
<b>Ambitions</b>			

## SEEDING INFORMATION

AWDC Seeding			
NORC Seeding			
Other Seeding .....			
<b>Notable results</b>			

### Sponsors:

### Publicity Please give the name of organisation and personal contact (if you have one):-

**Local Radio:** .....

Telephone: ..... Fax: .....

**Local Newspaper:** .....

Telephone: ..... Fax: .....

**Local TV:** .....

Telephone: ..... Fax: .....

#### OFFICIAL USE ONLY

Recd:	Amount:	Reference: 1 <sup>st</sup> DRIVER
Ack:	Account:	Reference: 2 <sup>nd</sup> DRIVER
		Reference: 3 <sup>rd</sup> DRIVER

# DECLARATION OF INDEMNITY

I have read the Supplementary Regulations issued for this championship and agree to be bound by them and by the General Regulations of the Royal Automobile Club Motor Sports Association Ltd.

In consideration of the acceptance of this entry and of my being permitted to take part in this championship, in respect of any parts of the championship not held on a publicly adopted road, I agree to save harmless and keep indemnified the **Royal Automobile Club Motor Sports Association Ltd**, such Person, Persons or Body as may be authorised by the **Royal Automobile Club Motor Sports Association Ltd** to promote or organise this championship and their respective Officials, Servants, Representatives and Agents, from and against all actions, claims, costs, expenses and demands in respect of Death of or Injury to or Damage to the Property of myself, my Driver(s), Passenger(s), Mechanic(s) or associated personnel, arising out of or in connection with this entry or my taking part in this championship.

State your age if you are under 18 \_\_\_\_\_

I declare that the drivers possess the standard of competence necessary for an event of this type to which this entry relates, also that the car entered is suitable and roadworthy for the event, is eligible for the championship in the class stated, and that the particulars given on the Entry Form are a true record as verified by me.

I understand that should the driver(s) at the time of this event be suffering from any disability whether permanent, temporary or otherwise which is likely to affect prejudicially his normal control of the car, he may not take part unless I have declared such disability to the Royal Automobile Club Motor Sports Association Ltd who have, following such declaration, issued a licence which permits him to do so.

I enclose the appropriate Entry Fee.

Signature of Entrant: ..... Date: .....

Signature of 1<sup>st</sup> Driver: ..... Date: .....

Signature of 2<sup>nd</sup> Driver: ..... Date: .....

Signature of 3<sup>rd</sup> Driver: ..... Date: .....

If any of the above is under 18 years of age, the above signature must be accompanied by signature of parent or guardian

.....  
.....  
Guardian of 1<sup>st</sup> Driver                      Guardian of 2<sup>nd</sup> Driver                      Guardian of 3<sup>rd</sup> Driver

## COMPLETION OF ENTRY

1. Check that you have **completed all questions** on this form.
2. Check that you have **completed the Entry & Commentary Information form accurately. No entry will be accepted without this - see Article 5.2**
3. Enclose the **Entry Fee**.
4. The Entrant and all drivers must **sign the Declaration** above.
5. **Send to** the Championship Secretary
- WENDY TOMLEY, CWM COCHEN, BETTWS, NEWTOWN, POWYS. SY16 3LQ.**
6. Enclose a **¾ view photograph** of the vehicle.
7. Enclose an **A4 addressed envelope** stamped **70p**.