BRITPART

The quality parts for Land Rovers

FREELANDER CHALLENGE 2 0 1 7 R E G U L A T I O N S

Promoted & Organized by

Marches 4x4 Motorsport Management Ltd



BRITPART FREELANDER CHALLENGE 2 0 1 7 Promoted by Organized by Marches 4x4 Motorsport Management.

Welcome to the 2017 BRITPART FREELANDER CHALLENGE All rounds of BCCC are eligible. Any 4 rounds of BCCC to count

This will run at National B status and be comprised of the following events:-

Rounds	Month	Date	Venue
Round 1	April	8 th & 9th	Pikes Peak, Myherin
Round 2	May	13 th & 14th	Ceri
Round 3	June	3 rd & 4th	Forrest Estate, Scotland
Round 4	July	22 nd & 23rd	Radnor
Round 5	September	9 th & 10th	Bovington Training Area, Dorset
Round 6	October	21 st & 22nd	Walters Arena

Contacts:-

Championship Secretary. Lilian Turley

Oakdene,

32 Park Road,

Berry Hill,

Coleford,

Glos

GL16 7QU

Tel: (H) 01594 810161 (M) 07896 967443 email: lilianturley@btinternet.com

The **BRITPART FREELANDER CHALLENGE 2017** will comprise the above rounds with 4 out of 6 BCCC Rounds to count and all other scores to count towards final Challenge classification. It is open to all registered contenders who may register up to the conclusion of signing on at the second round.

Competitors MUST BE registered prior to the event for those points to be valid to count towards the Championship. All Drivers will require minimum Nat B (Non Race) Cross Country Competition Licence.

Please read the Regulations very carefully, and if you have any queries, please contact the appropriate official. I wish you well with your preparations and look forward to seeing you all at the first event.

Selwyn Kendrick

REGULATIONS

1. TITLE and JURISDICTION

2. THE BRITPART FREELANDER CHALLENGE 2017 is organised and administered by Marches 4x4 Motorsport Management Ltd and the events will be held under the General Regulations of the Royal Automobile Club Motor Sports Association Ltd ('MSA') (incorporating the provisions of the International Sporting Code of the FIA), the MSA British Cross Country Championship Regulations, these Championship Regulations and any written instructions the Club may issue for the Event. Championship Registration No: 2017/002

3. COMPETITORS

2.1 Competitors must be fully paid up members of an MSA recognised Club and holders of an MSA National B(Non Race) Cross Country Competition Licence or higher to be eligible for the **BRITPART FREELANDER CHALLENGE 2017**. They will also have to comply with all the criteria specified in Article 3 - Registration.

2.2 Driver & Navigator must be present in all rounds.

2.3 An entry confirms that a named driver will drive the vehicle identified on the entry form and displays the competition number allocated. During a round a driver may drive two vehicles only if he has entered for a second time, with the second car identified on that entry form and displays the competition number allocated for that second vehicle. The full entry fee must be paid for the second vehicle. During a round two drivers may drive one vehicle, provided the 2nd driver has paid the appropriate entry fee.. The competition number displayed must be the one allocated to that driver. Championship and round points cannot be transferred between drivers or vehicles.

3. REGISTRATION

- **3.1** Completed Registration forms to be returned to the Championship Secretary who will issue a Championship Registration No. The Registration Fee for the championship will be £100 per crew. Payable to Marches 4x4 MSM Ltd.
- **3.2** Registrations will be accepted either through the post or at championship events. All registration forms must be accompanied by the correct fee competitors will be issued with registration number.
- **3.3** Driver's Entry Fees: Once registered each competitor will be sent round regulations and entry form prior to each round. The entry fee for each round will be £325 and must be paid in full before scrutineering.
- **3.4** In order to be eligible for point's competitors must register prior to the start of the first event at which they wish to claim points. *Competitors MUST BE registered prior to the scoring of points for those points to be valid to count towards the Championship.*
- **3.5** Competitors must sign-on for championship purposes at each event. Championship registration numbers will be checked and a declaration of vehicle eligibility signed. .

3.6 Once a competitor 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.

4.DECALS Competitors in the championship must make available an area **300 x 160 mm** high on front of car and another A4 size on either side of the car in a prominent position for publicising the championship and its sponsors. Championship decals must be fixed to the car whilst competing otherwise points will not be allocated

for that event.

5 ENTRIES

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

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

6CHAMPIONSHIP COMMITTEE

6.1 The Committee will comprise: - Selwyn Kendrick, Chris Ratter, Tim Curran & Roberto Aliperti. The Committee will be responsible for the administration of the championship rules.

6.2 The Panel of Stewards for the championship will be David Lucas Chairman, Jim Molay and Sue Sanders Any appeal against any decision of the Organising Committee must be made to the Panel of Stewards in accordance with section [C] Page 71 C6.1 to 8.1 of the 2017 MSA Yearbook. and will be heard by any 3 from the panel.

7. CHAMPIONSHIP CONTACTS

Championship Secretary: LILIAN TURLEY

OAKDENE, 32PARKROAD, BERRY HILL, COLEFORD, GLOS GL 16 7QU

Tel: (H) 01594 810161 (M) 07896 967443 e mail: lilianturley@btinternet.com

Eligibility Scrutineer: VIC PALMER E mail: palmlixer@aol.com

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 competitors 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. Competitors can drop two out of the six BCCC Events but otherwise ALL ROUNDS COUNT. Should any event be cancelled, as much notice as possible 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 on an individual basis to driver or passenger based on finish positions.
- 10.2 The number of points which will be awarded is as follows:-

1st Overall 50

2nd 45

3rd 40

4th 35

5th 34

6th 33 and so on. This will be based on the registered contenders listed in the final results. These will be called "Overall points".

1st registered contender receives 50 points

10th registered contender receives 29 points

20th registered contender receives 19 points

38th registered contender receives 1 point.

10.3 The number of points which will be awarded to the first placed contender in each class is **10** and the next highest placed will receive **9** and so on. This will be based on the registered contenders listed in the final results. These will be called "Class points". 1st registered contender receives 10 points,

10th registered contender receives 1 point.

- 10.4 In addition all crews receive 1 point for starting the event ("Starting points").
- 10.5 To ascertain final placings in the Championship a contender will add together:-
- 10.5.1 Overall points
- 10.5.2 Class points
- 10.5.3 Starting points
- e.g. A contender who is 1st overall & 1st in class has the following points in the first round:

Overall points 50 Class points 10 Starting points 1 Total 61

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

Overall points 34

Class points 8

Starting points 1

Total 43 __

- **10.6** If only one crew member registers for championship points, then both crew members are eligible. Drivers and passengers will receive equal points. Both driver & passenger must take part in a minimum of 4 rounds for points to count.
- **10.7** It is the competitor's responsibility to query/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 7 days of the date of posting such results to all competitors, as defined by the Championship Secretaries' records.

11. AWARDS

- **11.1** Championship awards will be presented at the 2017 Championships Dinner (probably January 2018 to coincide with Autosport Show at NEC). Special deals for accommodation normally available, details will be published later in 2017.
- **11.2** The following awards will be presented:

OVERALL - BRITPART FREELANDER CHALLENGE 2017

1st Driver & Passenger An Award Each

2nd Driver & Passenger An Award Each (subject to 5 Registered Crews)

3rd Driver & Passenger An Award Each (subject to 8 Registered Crews)

(The above competitors will not be eligible for class awards)

CLASS

1st in class - Driver 1st in class - Passenger

2nd in class - Driver 2nd in class - Passenger (subject to 5 registered crews)

3rd in class - Driver 3rd in class - Passenger (subject to 8 registered crews)

AWARDS will be given for competitors under 21

1st in class - Driver Under 21 (An award) proof of age must be produced at Signing On)

1st in class – Passenger Under 21 (An award) proof of age must be produced at Signing On)

- 11.3 In order to be eligible for an award competitors must have started Four Championship events.
- **11.4** Additional awards may be presented at the Organisers' discretion.
- 11.5 No person can win more than one award.(except Under 21 Driver/Passenger)

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

12. ELIGIBLE CARS

12.1 The Championship is open to Landrover Freelanders only. All vehicles must comply with MSA Regulations including safari + [or plus], Cage with door bars, external cut off, laminated windscreen, film covered driver & passenger windows, fia spec seats & harnesses (but they do not need to be in date).

All vehicles must comply with blue book regulations in particular J5 -5.20.13 and R46-48.10.10.

- **12.2** Competitors 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 competitor. Failure to agree to stripping / sealing or breaking a
- **12.4** To make provision for scrutineers' wire seals, every engine must have available 1/16th diameter holes predrilled 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 All cars may be weighed at scrutineering and after or during the event for minimum weights. Sealing points for ECU, fuel pressure sensors must be provided. Any competitor may on request (of competitor or scrutineer) have to swap ecu's with another competitor EUC plugs OBD & diagnostic ports fuel pressure sensor, must be sealed after rolling road test. seal will result in the loss of points throughout the year, or a penalty decided by the Stewards of the Championship.

Any and all units that require sealing must be sealed by MSA scrutineer and correct MSA paperwork must be filled out and a copy given to the driver & championship scrutineer.

13. CLASS

There will be two classes- Production and Super-Production. Additional awards for competitors under 21

Group	Class	Capacity	Brief Description of Modifications
1 Standard Production	A	Any fuel any capacity	Additional gauges, front seats, springs and shock absorbers except their standard location must be retained, air filter elements, brake friction materials, wheels and tyres, additional spare wheel, auxiliary lights, underbody protection. For full details see section 13.1
2 Super- Production	В	Any fuel, any capacity	Must retain orginial vehicle silhouette, but may fit additional shock absorbers, modified suspension, non-standard engine and gearbox. For full details see section 13.1.

13.1 Vehicle eligibility

All weights and power listed below are taken from Landover free sales literature and is a guide line 1.8 ltr petrol 1427kg torque 118 lbft TD4 2ltr diesel 1555kgs torque 192 lbft V6 petrol 1567kgs torque 177 lbft

Competitive minimum weights taken from 2010 FIA regulations this is part of a much larger list.

The FIA regulations will be adopted meaning that for this season for supercharged (i.e. including turbocharged) petrol engines the nominal cylinder capacity will be multiplied by 1.7 and the car will pass into the class corresponding to the fictive volume thus obtained. For supercharged diesel engines the multiplier will be 1.5

Minimum Weights 1600cc up to 2000cc Over 2000cc up to 2250cc Over 2250 cc up to 2500cc

1350kgs 1600kgs 1600kg

Freelander Challenge 2017

13.1.1 GROUP 1 - PRODUCTION.

Vehicles will require an MSA stage log book to compete in stage rallies these can be applied for at any round of the BCCC from the scrutineer. All vehicles must comply with 2017 MSA Yearbook regulations in particular J5 - 5.20.13 and R18 -18.6

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 competitor's responsibility to provide evidence if required, of the vehicle's eligibility.

Modifications to assist disabled drivers in car control are permitted as long as there is no enhancement to performance and have been checked by a scrutineer prior to any competition in events to the scrutineer's satisfaction.

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 must be outside of the cockpit.
- . 8 The material of the engine mountings are free, but the number and location must remain as original.

- . Well as to the chassis. 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 at least 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 on Freelanders.
- . 4 Drive shafts and inner & outer CV joints may be replaced with upgraded units
- . 5 Gear box casing must be sealed by MSA scrutineer

C SUSPENSION

1 SPRINGS 2

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

. 2 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) The fluid tanks for the shock absorber may be attached in the wheel arches as well as to the chassis.
- . (e) Suspension travel straps are permitted.

D WHEELS AND TYRES

. 1 Wheels are free and tyres are to AT pattern to be controlled approved MSA list of AT tyres will apply

- provided that they 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. Studded tyres are prohibited.
- . 2 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.
- . 3 Wheel fittings by bolts may be changed to pin and nut fittings.
- . 4 Mud flaps must be made from flexible material min 5mm thick and should extend 4cm beyond each side of tyres ,and a maximum of 10cm above the ground when the vehicle is stationary, and are mandatory on all 4 wheels
- . 5 Toyo Tyres are supplying the prize detailed below in D6. Toyo Tyres are the preferred tyres, but not mandatory.
- . 6 There will be a set of Toyo Tyres available to win for the highest placed Britpart Freelander Challenge Registered Contender using Toyo Tyres on rounds entered between Rd1 & Rd6. This prize will be awarded at the end of the season.

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. The same applies for anti-lock braking systems.
- . 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 rigidity. This bar must be made of tubes and may be mounted to the original bumper or chassis and may only be so constructed 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 a transparent material of at least 4mm 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. All glass must have plastic film fitted on inside of car unless laminated.
- (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/fastening system for the cap of the fuel tank is free.
- (h) Where an externally mounted spare wheel is relocated inside the vehicle the original external wheel mounting can be removed.
 - (i) External rear view mirrors, and front and rear windscreen wiper blades are free.
- (j) Rear Wheel Arch covers must be retained.
- (k) All body panels must be like for like i.e. steel for steel plastic for plastic

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. The interior trim maybe removed all sharp edges must be adequately covered with solid non inflammable material. All windows maybe replaced with plastic type, front windows must have slide apertures on both sides. All cars will be subject to weight checks throughout the year.
- (b) All the passenger seats, if occupied, must be fitted with head restraints. Rear seats may be removed but mounting bolts must be retained
- (c) The carpet may be removed.
- (d) CLASS A All door cards must be retained, they can be trimmed to fit rollcage...
- . CLASS B Front door cards must be retained, they can be trimmed to fit rollcage.
 - (e) 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 must comply with MSA Yearbook 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. Additional fasteners may be used
- . 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 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. All forced induction engines must have restrictors as follows Forced induction diesel 37 mm will stay the same for 2017 Restrictors to be sealed and available to be measured (as FIA drawing)
- . J JACK The jack is free and the jacking points may be changed for others which have no other function.

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 competitor'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.

13.1.2 GROUP 2 – SUPER-PRODUCTION	

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

- 4. 1 The engine must originate from the base car or from the Rover Group. The engine must be in its complete and integral form save for modifications authorised hereafter.
- 5. 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 valves per cylinder engines. 4,000cc for

engines with more than 2 valves per cylinder and/or forced induction.

- (c) Cylinder block Cylinder head
- . 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.
- 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.
- 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.
- . The Compression Ratio is free.
- . The Cylinder Head Gasket is free.
- . The Pistons, Piston Rings and Gudgeon Pins are free.
- . 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.
- Bearings: These are free except that they must be the original type of bearings and they must be to the original dimensions.
- . 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

- 11. The air filter, it's 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 modified charging device.
- 12. The air filter may be fitted with a grille.
- 13. 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.
- 14. 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.

- 15. It is permitted to fit a radiator in the fuel circuit.
- 16. Fuel filters are free except that they shall not exceed a unit capacity of 0.5 litres and may be added to the fuel circuit.
- 17. 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.
- 18. The pipes between the supercharging device, the intercooler and the manifold are free but their only function may be to carry air.
- 19. Water injection, if fitted, must be as originally fitted to the engine type in all respects.
- 20. 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 diameter of the single choke does not exceed 2 inches or 50.80mm and, in the case of a twin choke carburettor, the diameter 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
- . 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.
- . The air-measuring device is free.
- . The injectors are free, except for their number, position, assembly axis and operating principle.
- . The fuel lines feeding the injectors are free.
- . The electronic box is free provided it does not incorporate more data.
- . The fuel pressure regulator is free. In the case of a diesel engine the injection pump is free.
- (g) Restrictor (supercharged engines only)
- . 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.
- . 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.

(I) 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

- . 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.
- . Oil pressure may be increased.
- . 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 wheelbase. 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)
- 1.
- 2. 3.
- (p) (q)

Exhaust

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. 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. 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. Gaskets Gaskets are free. 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 gearbox supports and drive shafts

are free.

D SUSPENSION

- 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.
- . 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

Wheels are free except for the following:

- . 1 The maximum diameter of the tyre may not exceed 810mm.
- . 2 The wheels may be increased or decreased in diameter by 2 inches from the original specification.
- . 3 The wheels do not have to be of the same diameter.
- . 4 Wheel fixing bolts may be exchanged for studs and nuts or vice a versa.
- . 5 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.
- . 6 The wheel and tyre must be housed within the original bodywork including original wing extensions.

FBRAKES

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 it's 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) (b) (c) (d)

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. Hub caps and wheel embellishers: must be removed.

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. 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 there 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.
- . (I) 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 bootlids, 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 4 mm 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 crewmembers. 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 20cm2. A leak proof box must cover the battery 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. No more than four forward facing beams are allowed. 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.

14 ACKNOWLEDGEMENTS The Organisers wish to thank:- The various Landowners without whose kind cooperation this Championship could not take place. The Championship Sponsors: BRITPART

The following for their help and co-operation in running the events: All Marshals and individuals involved in building and dismantling the stages, marshalling and providing radio cover; All Doctors, Paramedics, Rescue and Recovery units. And all the competitors.

Good Luck for 2017. Selwyn Kendrick

N.B. Toyo tyres are currently available for the same price as last year if required.

BRITPART FREELANDER Challenge 2017

Det	ails	Driver	Passenger
Forename			
Surname			
Address			
Postcode			
Phone	Day		
	Evening		
	Mobile		
Email address	3		
MSA Licence No:			
Next of Kin: N	lame		
Address			
Telephone No):		

Vehicle

Make	LANDROVER	Model	FREELANDER	Capacity	
Spring Type		Class		Reg No	
Fuel	Petrol/Diesel/LPG	Forced	Yes/No	Colours	
		Induction			
FEES				£100-00	
BRITPART FREELANDER CHALLENGE 2017 Registration Fee					
BAC's payment details if required:-					
Marches 4x4 MSM Ltd					
HSBC Account No: 31398962 Sort Code: 40-34-33					

Please make all cheques payable to **Marches 4x4 MSM Ltd** Official Use Only

Received:	Amount:	Reference: DRIVER
Acknowledged:	Payee:	Reference: PASSENGER

Media Information

	Driver	Passenger
Name		
Hometown		
Job		
How long have you been competing		
What was your best event result?		
Vehicle Make/Model		
Vehicle Specification (engine, gearbox, suspension etc.)		
Any Sponsors? Please list them here		

Please Note: Before each round we have news items in the national motorsport news newspaper. If you have any news that could be featured please email them to: songasport@gmail.com

DECLARATION OF INDEMNITY

I declare that:- I have been given the opportunity to read the General Regulations of the Motor Sports Association and, if any, the Supplementary Regulations for this event and agree to be bound by them. I declare that I am physically and mentally fit to take part in the event and I am competent to do so. I acknowledge that I understand the nature and type of the competition and the potential risk inherent with motor sport and agree to accept that risk.

- 1. To the best of my belief the driver(s) possess(es) the standard of competence necessary for an event of the type to which this entry relates and that the vehicle entered is suitable and roadworthy for the event having regard to the course and the speeds which will be reached.
- 2. The use of the vehicle hereby entered is covered by insurance as required by the law, which is valid for such part of this event as shall take place on roads as defined by the law.
- 3. I understand that should I at the time of this event be suffering from any disability whether permanent or temporary which is likely to affect prejudicially my normal control of the vehicle, I may not take part unless I have declared such disability to the ASN which has, following such declaration, issued a licence which permits me to do so.
- 4. Any application form for a licence which was signed by a person under the age of 18 years was countersigned by that person's parent/legal guardian/guarantor, whose full name and address have been given below.
- 5. If I am the Parent/Guardian/Guarantor of the driver I understand that I shall have the right to be present during any procedure being carried out under the Supplementary Regulations issued for this event and the General Regulations of the MSA. As the parent/guardian/ guarantor I confirm that I have acquainted myself with the MSA General Regulations, agree to pay any appropriate charges and fees pursuant to those Regulations (to include any appendices thereto) and hereby agree to be bound by those Regulations and submit myself without reserve to the consequences resulting from those Regulations (and any subsequent alteration thereof). Further, I agree to pay as liquidated damages any fines imposed upon me up to the maxima set out in Part 3, APPENDIX 1 No 13 (PAGE 404) 2017 MSA Yearbook.

N.B. Where the parent/guardian/ guarantor is not present there must be a representative who must produce a written and signed authorisation to so act from the parent/guardian/ guarantor as appropriate.

7. I hereby agree to abide by the MSA Child Protection Policy and Guidelines. 8 Drivers :- I declare that I hold a full, valid driving licence
State your age if you are under 18
I declare that the information given on this entry form is a correct statement of facts as verified by me.
Signature of Driver: Date:
Signature of Co-Driver: Date:
If any of the above are under 18 years of age, the above signature must be accompanied by signature of paren

or Guardian.

Guardia	an of Driver	Guardian of Co-Driver	
COM	DI ETION OF DECISTRATION		
COIVI	PLETION OF REGISTRATION		
1. 2.	Check that you have completed all que Check that you have completed the En		
۷.	form accurately. No entry will be accurately.	-	
	5.2		
3.	Enclose the Entry Fee .		Ш
4.	The Entrant and Crew must sign the Do starting.	eclaration above before	
5.	Send to the Freelander Challenge Secret OAKDENE, 32 PARK ROAD, BERRY I		
•	GLOUCESTERSHIRE. GL16 7QU	hiala	
6. Note	Enclose a 3/4 view photograph of the ve : Where the Parent/Guardian/Guaranto		<u>□</u> a
repre	esentative who must produce a written from the Parent/Guardian/Guarantor as	n and signed authorisation to so	