

'09

2009 Regulations



# Beetle Challenge

## Start Your Engines

Classic Aircooled Beetle Racing is back! Grassroots, fun, low-cost circuit racing at some of the UK's best tracks.

The Beetle Challenge 2009 is to run as a separate class within the BARC South East region Tin Tops race series.

The Beetle Challenge will run as a class referred to as "Beetles".

The Published Sporting Regulations for the Tin Tops series are to be adhered to in all respects other than the published technical regulations that are specific to the "Beetle Class".

The restrictions have been kept to a minimum for many reasons, not least to encourage everyone to dig out what they have been collecting over the past decade, and assemble a circuit racer with it!

We want this to be the most affordable, fun racing we can have, and it looks to be some of the cheapest racing in the UK!



*The following Technical Regulations are set out in accordance with the MSA specified format and it should be clearly understood that if the following texts do not clearly specify that you can do it you should work on the principal that you cannot.*

### Latest News:

All the breaking news will be published on the official website:

[www.beetlechallenge.com](http://www.beetlechallenge.com)

## Beetle Challenge Regulations



## 2009 Calendar

15/03/2009 - Brands Hatch

13/04/2009 - Castle Combe

09/05/2009 - Brands Hatch

24/05/2009 - Mallory Park

27-28/06/09 - Lydden Hill

23/08/2009 - Snetterton

05/09/2009 - Lydden Hill

03-04/10/09 - Silverstone

14/11/2009 - Brands Hatch

*\*Note the June and October race schedule has not been finalised, but it is likely that all races will be on the Sunday of the weekend.*

### 1.0. General Description:

Beetle Challenge Race Series 2009 is for any Type 1 Volkswagen Beetle.

Vehicles do not have to be presented in a road legal condition but should be presented in a structurally sound condition and be fit for purpose.

### 2.0. General Technical Requirements and Exceptions:

The bodywork must be all steel and maintain the standard silhouette and plan profile above and below the axle centre lines. The rear apron may not be altered from the standard bodywork (see 2.4).

However the engine cover may be propped open by a maximum of 65mm, measured from the centre of the engine cover at its highest point.

The engine cover must be firmly secured by a minimum of 2 quick release fixings.

2.1. The floor plan is to remain as standard.

2.2. Guttering must remain as standard.

2.3. No aerodynamic devices are permitted.

2.4. Rear panels may be made removable.

2.5. Bumper and bumper irons may be removed.

2.6. A laminated front windscreen must be fitted. Side and rear windows may be replaced with Perspex or similar within the confines of MSA Technical/Safety Regulations. Quarter lights may be removed and one-piece type windows fitted.

2.7a. All interior trim must be removed.

2.7b. 1303 must retain its original dashboard moulding.

2.8. Full running boards must be retained in original locations. Jacking points may be removed. On board jacking systems are prohibited.

2.9. There is no stipulated minimum ride height, but vehicles must conform to MSA stipulated technical regulations.

2.10. Body panels may be exchanged between years.

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### 3. Engine:

3.1. The engine specification is free. However the engine must be of the type originally fitted to the vehicle, all vehicles must use a type 1 engine, the use of type 4 or similar is strictly forbidden. Aftermarket type 1 replacement engine casings of any material are allowed provided they are a direct replacement for the original item. Two piece cases may only be used.

3.2. Dry sumping is allowed.

3.3. Carburetion is free. For clarification fuel injection, supercharging and turbo charging is not permitted.

3.4. The exhaust system is free but must conform to MSA specifications.

3.5. The type of cooling is free (but must remain air cooled).

3.6. Extra oil coolers may be fitted but they and their associated fittings must remain internal to the bodywork.

### 4. Transmission:

4.1. Full synchromesh VW Type 1 gearbox must be used with 4 operable forward and one reverse gear. Removal of synchromesh units is prohibited. Locking or Limited slip differentials are allowed. Gear ratios are free. Aftermarket gearbox casings are allowed provided they are a direct replacement of a type 1 casing.

4.2. Gearbox mounts are free.

4.3. Up rated side plates and axles may be fitted.

### 5. Suspension:

5.1. Front and rear anti roll bars are free.

5.2. The use of spherical bearings and rod ends in the suspension is not permitted. (Urethane suspension bushes are allowed).

5.3. Adjustable rear spring plates are allowed.

5.4a. The original front suspension must be retained, lowering of the front suspension may be obtained by fitting “sway away” or similar adjusters, the amount of, or their positions are free.

5.4b. Early king and link pin vehicles may update to accept the later frame head and ball joint front beam.

5.5. Narrowed front beams are permissible.

5.6. Swing axle cars may update the rear suspension to IRS provided it is done to factory specification (only original VW components must be used, no alloy or Porsche parts should be used).

5.7. A camber compensator can be fitted.

5.8. A bolt in Torque Bar/Trapeze bar kit may be fitted.

5.9. Torsion Leaves/bars are free.

5.10. Dropped spindles may be used.

5.11. Long travel ball joints may be fitted.

5.12. Bump steer kits may be fitted.

5.13. Eccentric camber adjusters may be fitted.

5.14. Caster shims may used in any number.

5.15a. Front and rear dampers are free, but must be of the original type used. (coil over dampers or dampers with external reservoirs may not be used).

### 1302/1303 specific

5.15b. 1302/03 May use coil over dampers on the front only.

5.16. An upper front strut brace may be fitted.

5.17. All suspension mounting points must remain as factory.

5.18. Front top mounts are free.

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### 6. Electrics:

6.1. All standard vehicle lighting must be retained and be fully operational with all lenses/reflectors protected as per MSA regulations.

6.2. A high intensity rear warning light must be fitted and comply with MSA regulations.

6.3. Battery type and location is free. If fitted within the driver compartment a suitable battery box must be used.

6.4a. The standard type 1 VW distributor, Bosch 009 or its direct replacement must remain in the manufacturer's original form, be the sole means of ignition advance and retard and distribute the H.T. spark and trigger L.T. circuit. After market systems are not permitted.

6.4b. Points may be replaced with a single point electronic ignition conversion.

6.4c. The type and choice of coil is free.

6.5. Rear number plate light and housing and associated wiring may be removed.

6.6. A generator/alternator must be fitted and in working order.

6.7. An electrical/master switch must be installed as per MSA yearbook.

6.8. The type of battery and its location is free.

### 7. Brakes:

7.1. Brake & pedal assemblies must remain as factory.

7.2. The choice of lining material is free.

7.3a. Dual circuit brakes must be fitted.

7.3b. The choice of master cylinder is free.

7.3c. Brake fluid reservoir(s) are free as is the location.

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- 7.4. Brake proportioning valves are permitted.
- 7.5. Servo assistance is not permitted.
- 7.6. The handbrake does not have to be fitted or operational.
- 7.7. Front drum brakes may be upgraded with a disk brake conversion, the type of disk & calliper is free. Backing plates may be deformed or removed.
- 7.8. Rear drum brakes may be upgraded or replaced with an aftermarket disk brake conversion, the disk & calliper is free.
- 7.9. Braided brake pipes may be fitted.

### 8. Wheels & Steering:

- 8.1. The steering must be as standard in fitment and location and be used in an un- modified condition.
- 8.2. Wheels are free but must be of a maximum of 6.0x15

### 9. Tyres:

- 9.1. Nominated tyre size 195-50-R15
- 9.2. Nominated tyre is Toyo R888 in compound GG.
- 9.3. Tyre warmers or any form of chemical softening is prohibited.

### 10. Vehicle weight:

Currently no minimum weight, but the organisers reserve the right to introduce a weight limit, or success ballast as required.

### 11. Fuel/Fuel tank:

- 11.1. Fuel tanks are free but must be fitted within the standard location.
- 11.2. The fuel pump and its location are free.
- 11.3. The only permitted fuel is Pump fuel as defined in the MSA Yearbook.

### 12. Safety:

- 12.1. The roll cage must conform to the minimum standard as stipulated in the MSA yearbook. It must not pass through the habitable or fit to any part of the suspension either front, rear or to the frame horns. It must remain internal to the body shell.
- 12.2. Seat must contain integral headrest, it must be of fixed non movable construction and be bolted down to the floor with the minimum of 8mm bolts. Load spreading washers should be fitted under the bolts.
- 12.3. FIA approved harness (in date) must be fitted, as per MSA yearbook.
- 12.4. FIA approved extinguisher must be fitted (as defined in the MSA Yearbook) in either manual or electronic.

### 13. Miscellaneous:

- 13.1. Wings may have the lip trimmed or rolled to avoid rubbing but must retain their original exterior profile.
- 13.2. Inner door skins may be trimmed for lightness but the door must retain its original profile and the strength and integrity of the panel should be maintained.
- 13.3. Bonnet and deck lids may have any double skinned area or excessive metal trimmed or removed to aid fitment but must retain its original profile.
- 13.4. All un-required wiring and horn may be removed.



**“Dust down that car which is lurking at the back of your garage and join us any time in the season”**

*Ex-Cup cars can accelerate your build time to go racing!*

### USEFUL LINKS:

[www.beetlechallenge.com](http://www.beetlechallenge.com)

[www.barc.net](http://www.barc.net)

[www.msauk.org](http://www.msauk.org)

[www.rodbirley.com](http://www.rodbirley.com)

### PARTNERS:

[www.thingamies.com](http://www.thingamies.com)

### SPONSORS:

[www.toyo.com](http://www.toyo.com)

*All information was correct at the time of going to press. The organisers reserve the right to make any changes without prior notification.*

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13.5. Any metal associated with unused seat mounts, trim clips, battery mounting points and heater controls inside the body shell may be removed.

13.6. Wipers must be fitted and functional.

13.7. Screen washers do not have to be functional or fitted.

13.8. At least 2 rear view mirrors must be fitted.

13.9. Widow winder mechanisms may be removed.

13.10. All badges and trim may be removed.

13.11. Bonnet and deck lid hinges may be removed along with the handle and lock.

13.12. Holes may be made to the inner rear arches for ease of access to twin carburetors, care should be taken to ensure the integrity of the panel is kept; covers should be in place.

### 13. Exceptions:

In order to encourage participation any vehicle that does not conform to the aforementioned regulations may be considered on merit.

If agreed by the other competitors and the vehicle does not have a significant advantage, an exception may be agreed by means of weight penalty or being given a bye for a set period of time.

### 14. Commercial Undertakings:

14.1 Promotional Activities. Competitors competing in this series are requested to make their vehicles available for promotional activities.

### Contact Info:

Please make all enquires via email on:  
[contact@beetlechallenge.com](mailto:contact@beetlechallenge.com)

Further information and news updates will be posted on [www.beetlechallenge.com](http://www.beetlechallenge.com)



Need some help getting started?  
Contact us and we will assist you.

[contact@beetlechallenge.com](mailto:contact@beetlechallenge.com)

