2021 CLASSIC VW CUP TECHNICAL REGULATIONS

Version-5.0 December 2021

CLASSIC VW CUP

5 TECHNICAL

5.1. Introduction:

- a. The following technical regulations are set out in accordance with Motorsport UK specified format and it should be clearly understood that if the following texts do not clearly state that you can do it, you should adopt the principal that you cannot.
- b. Anything that is not explicitly authorised in writing by the Championship Technical Committee and anything that is not specified either in these regulations or in any Official Championship Bulletin is therefore strictly forbidden and thus will be regarded as a breach of these Technical Regulations and may be penalised as described in section 4. It should be clearly understood that technical regulations will be strictly enforced and any modification, addition, variation, tuning or removal other than specifically permitted in these regulations is prohibited.
- c. Regulations that have changed in substance from the 2020 PRE-2003 CLASSIC VW CUP Technical Regulations are normally indicated by being highlighted in yellow.
- d. CLASSIC VW CUP may be referred to in these regulations as CVWC.

5.1.1 Technical Queries:

Any matter affecting Technical Regulations must be put in writing to the Championship Eligibility Scrutineer, as any claim to have received clarifications or rulings on the Regulations must be substantiated by the production, on demand, of written confirmation of such rulings.

5.2 **General Description:**

- a. The CLASSIC VW CUP is for Competitors participating in 'hatchbacks', saloons, estates, coupes and van's (subject to Motorsport UK Bluebook compliance) from any of the following V.A.G. companies: Volkswagen, Audi, SEAT & Skoda.
- b. Vehicles from the Motorsport divisions of V.A.G. i.e. Seat Sport, Volkswagen Racing etc. are excluded unless specifically allowed in these regulations.
- b. All cars are subject to approval of eligibility by the Championship Organizers.
- c. Vehicles must be based on a floor pan which was in serial production before 2006.
- d. Cars based on a floor pan which was in serial production after 2006 may be eligible subject to the Championship Organisers approval.
- e. There is no requirement for MOT, road tax or insurance.
- 5.2.1 Unless specifically permitted in these regulations, all components must be to original specification.

5.2.2 Eligibility:

- a. All cars are subject to approval of their eligibility by the Championship Organisers.
- b. The responsibility to prove eligibility is always that of the Competitor. For clarification of a Competitor refer to the Motorsport UK Yearbook Section (B) Nomenclature & Definitions.
- c. Proof of a vehicles' eligibility may be required to be substantiated by production of documents, where issued, for the vehicle and these must be available for inspection when required.
- d. Where no such paperwork is available, the Competitor must produce written confirmation from the Championship Organisers as to the eligibility of the vehicle model in question.
- e. The Championship Organisers in conjunction with a Licensed Eligibility Scrutineer shall determine matters as to the eligibility and the implementation which may involve photographing any part of the vehicle and performing electrical diagnostics at the scrutineer's discretion.
- f. All competitors must have the maximum power of their car measured on a rolling road and complete the Power declaration Form. Spot checks may take place during the year via a mobile dyno.
- g. Any competitor unable to provide proof of performance as detailed above, may only run in the Invitation Class.
- h. When vehicles are running in "One Make" spec. a reference set of regulations will be held by the series scrutineers for said vehicles.

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5.2.3 Class Structure:

5.2.3.1 Cars will compete in two classes based on power to weight ratio including driver and engine size.

5.2.3.1.

5.2.3.1.2 Class A: -

- i. Modified 1800cc Turbo cars e.g. Mk1 Seat Leon Cupra Cars
- ii. Modified Naturally aspirated cars with engines up to 3200cc V6 engines
- iii. Max. power to weight ratio is 193 BHP (at wheels) / ton for Turbocharged cars
- iv. Max. power to weight ratio is 210 BHP (at wheels) / ton for Naturally aspirated cars up to 3200cc
- v. TSFI Engine vehicles produced before 2006
- vi Vehicles that have had engine swops (Subject to written approval)
- iv. Four Wheel Drive Vehicles Are Permitted (Subject to written approval)

5.2.3.1.3 Class B: -

- i. Less modified cars e.g., Road going race cars, VENTO Challenge spec cars (complying to our Class B Regulations where applicable)
- ii. Throttle bodies are permitted on Normal Aspirated engines
- iii. Max. power to weight ratio is 148 BHP (at wheels) / ton for Turbocharged cars
- iv. Max. power to weight ratio is 165 BHP (at wheels) / ton for Naturally aspirated cars.
- v. Cars in Class B can run engines from newer models, subject to approval by the Championship Organizers. This must be applied for upon entering the championship
- vi. Max. power to weight ratio is 155 BHP (at wheels)/ton for VR6 spec cars.
- iv. "One make" MK 2 Golf GTI 8v and 16v models.
 - Vehicles in this class must have a standard engine, standard induction system, standard gearbox and standard brake callipers.

5.2.3.1.4 No Longer Applicable

5.2.3.2 Mandatory compliance with the Mk2 Golf GTI/MK5 Golf GTI regulations (for the series they would run in) if they also race in that Championship. MK2 Golf GTI's in one make spec. will compete for the MK2 Trophy.

This is awarded to the highest placed driver across the season using that spec vehicle.

- 5.2.3.3 Should the performance of any car or type of car appear to differ from the 2021 Technical Regulations, the Championship Organisers reserve the right to restrict cars by any means it sees fit.
- 5.2.3.4 The maximum power to weight ratio is calculated BEFORE any weight penalties due, performance enhancements as listed in Technical Regulation Section 5.14 Vehicle Weight.

5.2.3.6 **Guest Competitors**

- a. Competitors with Vehicles not complying with these regulations may be invited to compete subject to Championship Organisers approval.
- b. Vehicles that, whilst not strictly adhering to the regulations, have been prepared sympathetically to the spirit of the championship and with Championship Organisers approval, may be invited to race under observation.
- c. Competitors wishing to race as guests must submit a written specification of their vehicle, to the Coordinator. It must detail all areas where the vehicle does not comply with these regulations. This specification shall be made available to the eligibility scrutineers for pre and post event checks.
- d. Guest vehicles will be invited by the Championship Organisers on a race by race and individual vehicle basis. The vehicle must not deviate from the specification submitted, unless such changes are approved by the Championship Organisers. Any approval may be withdrawn at any time by the Championship Organisers.
- e. Guest competitors will not be eligible for:
 - i. Podium recognition.
 - ii. Championship awards / trophies.
 - ii. Championship points.

5.2.4 **Presentation:**

- a. At the start of each free practice, qualifying session or race, the cars must be presented to a high standard and must be clean and in good order. The Championship Organisers reserve the right to forbid cars not meeting this requirement from taking part.
- b. Presentation of a vehicle for scrutineering is a declaration by the Competitor that the vehicle is eligible for that event.

5.2.5 **Technical Checking:**

- a. The Championship Eligibility Scrutineer / Championship Organisers reserve the right to inspect, test, measure, seal or impound any component fitted to or used in conjunction with any car registered in the Championship either personally or through a nominated representative. The costs of such checking shall be borne by the CVWC but the CVWC shall not be liable for the costs of stripping or reassembly of vehicles after the checks have been carried out. This will be the sole responsibility of the Competitor. Exceptions to this may include appeal / protest according to the Motorsport UK Yearbook 2021.
- b. Any breach of the Technical Regulations or a breach of the procedure surrounding the Technical Regulations will be the subject of a report to the Clerk of the Course.
- c. A car found to be ineligible for the championship must race only in the invitation class and no points will be scored until the vehicle conforms to the regulations.
- d. Any component sealed by a Motorsport UK Licensed Scrutineer must remain sealed and may not be tampered with in any way. In the event of a seal needing to be broken for repair or replacement, prior to doing so the Championship Eligibility Scrutineer must be informed in writing and approve the seal being broken. Re-sealing by a Motorsport UK Licenced Scrutineer will take place after technical checks have been made at the next race meeting.
- e. If a vehicle/component is sealed for subsequent technical examination the Championship Eligibility Scrutineer, within the applicable time limit, will state to the Competitor/Competitor that he will examine the vehicle/component on a stated date and time and at a specified location and the sealed items must be made available for his inspection. These arrangements are not negotiable. If a vehicle/component is not made available for an eligibility examination as required by the Championship Eligibility Scrutineer, it will be considered as ineligible and will be reported as such to the Clerk of the Course for the application of penalties laid down under Motorsport UK Regulations and these Championship Regulations.

f. Data Logger: -

- No Longer applicable-
- ii. The Championship organiser reserve the right to fit a data logger (provided by the Championship Organisers) to any vehicle. This will be used to monitor the vehicles performance.
 A Championship Data Logger may be required to be fitted to any vehicle at any time during an event by the Scrutineer or his appointed representative. Any additional hardware for the data logger will be supplied by the organisers. The unit will be sealed upon fitment.
- iii. The Data card from any logger may be interrogated by the Championship Eligibility Scrutineer or his appointed representative at any time during post qualification or race scrutineering in Parc Fermé
- iv. The data from the logger will be analysed and will be used to check vehicles actual performance against the declared performance values as stated in the vehicles Technical Passport.

g. Judicial Camera: -

- i. All cars must carry an on-board, suitably mounted, front facing Judicial camera during all official qualifying sessions and races.
- ii. It is the Competitors responsibility to supply and fit the Judicial camera as detailed in 5.2.5.g.
- Iii. The recommended judicial cameras for use within the Championship are as follows: Go Pro HD Hero Go Pro HD Hero 2 Go Pro HD Hero 3 White Edition Go Pro HD Hero 3 Silver Edition Go Pro HD Hero 3 Black Edition.
- iv. The cameras detailed in 5.2.5 g. iii must be used in conjunction with an approved roll cage mount.
- v. The onus is on the competitor to ensure the Judicial cameras is switched on a maximum of three minutes prior to leaving the assembly area. The camera must then be switched off, and have the data cards collected by a CWVC representative in the Parc Fermé after the session has been completed. It is the competitor's responsibility to ensure that the data card has been collected before the car has left Parc Fermé. If in the event of a car not being recovered to Parc Fermé the camera must be left running until a CVWC representative has been to collect the data card.
- vi. If a Judicial camera is fitted to the vehicle then it must be switched on and recording for all official qualifying sessions and races. Failure to have the camera switched on, or there is no footage at post qualification or race scrutineering for analysis at post qualification or race scrutineering in Parc Fermé, may result in a report to the Clerk of the Course.

h. All details contained requested within the Registration form must be submitted by the Competitor at the time of registration for the Championship. A Registration will not be accepted without submission of the relevant details.

This includes: -

- i. BHP at wheels. This will be measured on a vehicle dyno before the first round of the season. Where a team/competitor cannot provide this detail they can self declare the BHP. If a competitor self declares the organisers reserve the right to allocate a base weight for said vehicle based on the information provided. Self declared vehicles may be asked to run as a guest if the BHP cannot be fully established by the organisers.
- ii. The total weight of the vehicle. This shall include the weight of the driver (Wearing all his apparel) and weight penalties incurred through modifications.
- 5.2.7 Cars built for one make championships are eligible under these regulations. However, an equivalent road going model e.g. Seat Leon Cupra 4 for Leon Cup Cars, Beetle RSi in the case of Beetle Cup Cars and Seat Toledo 1.8T for Toledo Cupra R cars will be used to determine the standard specification.

5.3 **Safety Requirements:**

5.3.1 All Motorsport UK Yearbook 2021, **Section K**, Competitor Safety Criteria Regulations, apply as relevant unless stated herein.

5.3.2 Safety Roll-Over Structures:-(K 1 to K1.8) applies

- All vehicles must be fitted with a safety roll-over structure as defined in the Motorsport UK Yearbook 2021 Section K
- b. Interior fittings, trim and bodywork may be locally modified to allow fitting of the safety roll-over structure and any door bars.
- c. Cars running non-steel doors must be fitted with double door bars on the driver's side, either crossed or parallel.

5.3.3 Fire Extinguisher: (K3 to K3.5 applies)

- a. All vehicles must be equipped with a fire extinguisher. Motorsport UK Yearbook 2021 Regulation Q 19.14.7 applies
- b. The fire extinguisher must not be disarmed in any Parc Fermé area without the specific permission of the Championship Eligibility Scrutineer. Any Competitor that is found with a disarmed fire extinguisher in Parc Fermé for whatever reason will be penalised.
- c. The following information must be clearly displayed on each fire extinguisher:
 - ii) Type of extinguishant.
 - iii) Weight or volume of extinguishant.
- d. It is mandatory that the following information is clearly displayed on each fire extinguisher:
 - i) Capacity
 - ii) Service date of extinguisher. It is mandatory that all fire extinguishers must be serviced in accordance with the manufacturers guidelines, or every 24 months whichever is sooner (K) 3 applies)
- e. During Events all extinguisher systems must be in the 'ARMED' condition (i.e. be capable of being operated without the removal of any safety device) at all times while competing or practising, including post-Event scrutineering.
- f. The external triggering point must be positioned close to the circuit breaker (or combined with it) and must be marked by the letter "E" in red inside a white circle of at least 10cm diameter with a red edge in accordance with Motorsport UK Yearbook 2021 Regulation (K)3.2.2

5.3.4 Main External Circuit Breaker:

- A Main External Circuit Breaker in compliance with the Motorsport UK Yearbook 2021 Section (K) 8. is mandatory.
- b. The switch location must be identified by a Red Spark on a white edged blue triangle with a base of at least 12cm. and the 'On' and 'Off' positions clearly marked.
- c. The circuit breaker when 'operated' must isolate all electrical circuits, data loggers, transponders, etc.
- d. When the circuit breaker is 'operated' there must be no power source capable of keeping the engine running.

- f. The triggering system for the circuit breaker should be situated at the lower part of the windscreen mounting, preferably on the driver's side or below the rear window.
- g. On cars of Periods A to F (pre-1977) the triggering system may be mounted approximately vertically below the line of the scuttle on the driver's side.

5.3.5 **Lights:**

Lights detailed in Championship Regulations 5.10.5 must be in working order throughout the entire Event.

5.3.6 **Seat and Seat Mounting:** (K 2.2. applies)

- a. The Seat and Seat Mounting shall comply with the Motorsport UK Yearbook 2021 Regulation (K) 2.2 and (K) 2.3
- b. It is recommended that the Driver's seat is a racing seat with a current FIA homologation.
- c. Additional seat padding is permitted to a maximum of 50mm. Any additional padding or covering placed on the seat must be fire retardant to FIA standard 8855-1999.
- d. The seat mountings shall be appropriate to the seat fitted (and complying with FIA Article 253.16) must be used.

5.3.7 **Seat Belts:** (K 2.1. applies)

- Mandatory use of seat belts. Motorsport UK Yearbook 2021 Regulation Q19.14.2 applies.
- b. Where Vehicles constructed in Periods A to E have seat belts fitted, the seat belts must comply with Championship Regulation 5.3.7 c. to 5.3.7 g. inclusive.
- c. The Driver's seat belts must have a current FIA homologation.
- d. It is mandatory to use seat belts, with a minimum 'four point' configuration. Complying with the Motorsport UK Yearbook Regulation 2021 (K) 2.1.2.
- e. Seat belts must be correctly adjusted at all times during events: (Two shoulder straps and one lap strap, with four anchorage points on the chassis/body shell or roll over bar of the vehicle).
- f. It is permitted to use an FIA approved Frontal Head Restraint (FHR). If an FHR device is used the seat belts and helmet must be appropriate to the FHR device in use and Competitors are responsible for this complying with the Motorsport UK Yearbook 2021 regulation (K) 10.4.

5.3.8 Race Clothing: (K9.1 and K9.3 applies)

- a. Competitors are strongly advised to wear flame resistant, socks, underwear and balaclava.
- b. Flame resistant gloves and shoes are mandatory. Motorsport UK Yearbook 2021 Regulation Q10.1.(c) applies.
- c. Competitors overalls must be clean and maintained to a reasonable standard.
- d. Patches should be affixed to overalls (with thread that is flame resistant and non-melting) in instructed locations.

5.3.9 **Crash Helmet:**

Crash helmets must comply with the requirements of Motorsport UK Yearbook 2021 Regulation (K 10.1 to K10.4 applies).

5.3.10 **FHR:**

Mandatory for all forms of circuit racing except for period defined vehicles (pre-1977), which will remain as a recommendation. Motorsport UK Yearbook 2021 Regulation (Q) 10.1.e. applies).

5.4 General Technical Requirements and Exceptions:

- a. All vehicles must comply with MOTORSPORT UK General Technical Regulations and the relevant parts of Sections J & Q of the Motorsport UK Yearbook 2021 except where specified below.
- b. No component may be substituted which serves to alter the shape or size of the body shell and/or panels themselves or increases the capacity of the engine beyond that which is permitted within these Technical Regulations. Full details of optional equipment must be submitted to the CVWC for possible inclusion on a vehicle by vehicle basis prior to that item of equipment being fitted.
- c. Fixing components such as nuts, screws, washers, lock washers; spring washers, etc. are free and may be upgraded.
- d. It is permitted to repair faulty threads using Keen Inserts/ Helicoils. Where thread inserts are utilised the original thread diameter and pitch must be respected.
- e. Within these Technical Regulations the word "standard", "original" or "pattern Part" used as a description of components is to be interpreted as: "The specified component from the V.A.G. companies:- Volkswagen,

- Audi, SEAT & Skoda factory or the manufacturers parts list for the model or engine shown on the entry form or registration form .
- h. No modifications are permitted beyond the repair or adjustment processes specified by the factory or the manufacturer". Eligibility checking will be by comparison to spare parts supplied by the manufacturer's official agent.
- i. "Free" as referred to in these Technical Regulations shall be interpreted as "within the limitations imposed by the Motorsport UK Yearbook 2021 Regulations".
- j. Advertising on vehicles is subject to requirements set out in Motorsport UK Yearbook 2021 Regulation H29.1.2 & H29.1.3.
- k. All vehicles must be of sound construction and mechanical condition and be well maintained.
- I. Competitors registering do so in the full knowledge that CVWC reserves the right to require the Eligibility Scrutineer to carry out, record and enforce eligibility checks which may include the sealing of component(s) for subsequent checking. The costs of such checking shall be borne by the CVWC but the CVWC shall not be liable for the costs of stripping or reassembly of vehicles after the checks have been carried out.

5.5 **Chassis:**

- a. The chassis as produced by the manufacturer with the original material must be retained in all aspects in respect of material, thickness & contour except as allowed in Championship Regulations 5.5 c. to 5.5 e.
- b. Lightening or reducing of chassis, or chassis member strength, is prohibited.
- c. A front strut brace may be bolted or welded to the top of the front turrets.
- d. A 4-wheel drive chassis may be converted to 2-wheel drive subject to written approval from championship organisers.
- e. Mk1 SEAT Leon Cup specification cars are permitted to use multi-link rear suspension, (Using this type of suspension will incur a weight penalty).
- f. No Longer Applicable

g. Class A: -

- i. Seam welding is permitted, and extensions to the roll cage are permitted through the front bulkhead but may not extend past the upper suspension point.
- ii. Unused brackets may be removed.
- iii. Spare wheel well may be removed.

h. Class B: -

- i. No chassis stiffening is permitted except that derived from the fitting of the roll cage using only the six or eight mounting feet inside the car, and a 3mm thick plate welded to the chassis to which the cage is mounted in accordance with Motorsport UK Yearbook 2021 Regulation K 1.3.2.
- ii. Seam welding is not permitted.
- iii. Strengthening of mounting points and changes in component material of the body shell or panels is prohibited. Except as detailed in 5.5 h. iv.
- iv. The only exception to Regulation 5.5 h. iii is cars built to the original Polo G40/VENTO Challenge regulations. These may have seam welded shells and are allowed a 'B' pillar transverse roll cage tube which is welded to the centre of the floor. VENTO Challenge cars can have the Rollcage extended to the Front struts as per original build.
- h. Towing eyes / straps must be a contrasting colour to the surrounding area (usually either Day-Glo red or yellow) and must respect the requirements of Motorsport UK Yearbook 2021 Regulation (Q19.1.3).
- i. In addition to **Q19.1.3**, it is strongly recommended that all cars must, wherever possible, be equipped with two front and two rear towing eyes positioned equally either side of the longitudinal centre-line. They must be clearly visible, marked with an arrow and the word "tow" and the wire painted in yellow, red or orange to contrast with the vehicle colour scheme.

The towing eyes must be made of at least 6mm diameter steel wire rope with a 6x19 wire core, each which must have a breaking-strain of at least 2 tons. Each towing eye must allow the passage of a cylinder with a diameter of 60 mm, situated 25mm forward of the adjacent bodywork - 100 mm above and below this hole must retain clearance to enable the recovery crews to attach straps and shackles.

The towing eye must be fixed to a structural part of the chassis with a minimum of M12 fixings, the inner part must be flexible in order for the towing eye to be retracted inside the bodywork profile. A "pull-cord" must be attached to the towing eye to enable the marshals to access the wire loop. The end attached to the chassis may be either 'thimble' or 'open-loop' style.

5.6 **Bodywork and dimensions:**

5.6.1. **General:**

- a. The exterior of the car must be immediately recognisable as the model being raced.
- b. It is only permitted to make holes in panels for the passage of cables, fuel, water, oil, hydraulic, instrument or fire extinguisher lines.
- c. All redundant holes must be covered with a non-flammable material.

5.6.1.1 **Interior:**

- a. All interior trim may be removed.
- b. Drivers' seat may be replaced.
- c. Passenger and rear seats may be removed.
- d. If the original inner door trim panels are removed, the inside of the door must be neatly covered with sheet aluminium or some other suitable non-inflammable material.
- e. The drivers' door window must remain operable by the driver whilst normally seated or, if plastic windows are fitted, they must contain an aperture that enables the driver to make hand signals and must comply with Motorsport UK Yearbook 2021 Regulation J5.20.8.
- f. Instruments may be changed or added to.
- g. An interior rear-view mirror must be fitted to the left of the driver (or to the right in the case of LHD).
- h. An adequate means of de-misting the windows must be provided.

5.6.1.2 Exterior:

- a. Fog, spot or driving lights, sidelights, indicators and Inner headlights on vehicles fitted with dual headlights (4 light system) may be removed as may any manufacturers 'knock out' panels below front bumpers for the fitting of auxiliary lights and the apertures may be used for cooling.
- b. Wheel arches may have the reverse edge rolled back for tyre clearance.
- c. A small wheel arch extension 'spat' of no more than 1" in width may be attached to the front wings to allow the use of wider wheels.
- d. It is not permitted to use a front plastic windscreen.
- e. Any replacement body panels must be of original shape and material, but bolt on panels may be replaced with fibreglass or composite material alternatives of the same dimensions. Composite roof panels are allowed, but subject to CVWC approval. This request must be made when you register for the championship and is subject to the correct ROPS being fitted.
- f. Additional arch kits, produced from fibreglass or composite material may be allowed, ONLY WHEN explicitly authorised in writing by the Championship Organisers.
- g. Class A:
 - i. It is permitted to modify Inner wings for tyre/driveshaft clearance.
 - ii. It is permitted to shorten wheel arches back to the first swage line or by a maximum of 20mm if there is no visible swage line.
 - iii. Shortened arches must either be folded back or welded to the inner arch in order to avoid producing sharp edges; there must be no sharp edges.
 - iv. Side and rear Window material is free but must comply with current Motorsport UK regulations.
 - v. If plastic windows are used the driver's window must remain fully functional or contain an aperture for the purpose of hand signals.
 - vi. Front splitters may be fitted provided that Technical Regulation 5.6.3 (Ground Clearance) is respected.
 - vii. All VW Beetles may use the standard Beetle RSi Body kit and Toledo Cupra R the original fibreglass or composite material rear arches.
 - viii. The use of a non-standard rear wing is permitted provided it does not alter the Silhouette when the car is viewed from the front.
 - xi. Group 2 or Berg cup arches are permitted on Mk1 Siroccos' and Golfs'.

5.6.2 Silhouette:

- a. No Longer applicable
- b. Class A: -

Only modifications to the standard silhouette as detailed in 5.6.1.2 are permitted

c. Class B

No alterations to the standard silhouette are permitted.

5.6.3 **Ground clearance:**

a. Under no circumstance can any part of the bodywork, or of the suspended part of the car excluding the exhaust system, be below a horizontal plane passing 40mm above the ground.

- b. Will be measured with the Driver on board (wearing his complete racing apparel),
- c. Will be measured with the vehicle and driver, including minimum Weight Ballast where applicable in the condition in which they cross the Finish Line or at any other time during an Event and without the removal of any solid or fluid matter including fuel.
- d. the vehicle may be stationery or moving during any testing.
- e. Ride height will be measured on any reasonably flat surface as deemed by the Championship Eligibility Scrutineer or his nominated representative. In the event of any discrepancy the circuit designated flat patch will be used to make any final judgement.

5.7 ENGINE

5.7.1 **General:**

The CLASSIC VW CUP regulations are based on power to weight ratio.

- a. All internal engine components are free.
- b. Engine choice is free, but must be from the Volkswagen, Audi, SEAT & Skoda passenger car range only.

5.7.2 **Cylinder Block:**

- a. Cylinder blocks are free if Championship Regulation 5.7.2 c. is respected.
- b. It is permitted to remove metal from the cylinder block.
- c. The cylinder block must be based on a standard production block from the Volkswagen, Audi, SEAT and Skoda passenger car range only.

5.7.3 **Cylinder head:**

- a. Cylinder heads are free if Championship Regulation 5.7.3 c. is respected.
- b. The replacement or modification of all mechanical components is permitted.
- c. The cylinder head must be based on a standard production block from the Volkswagen, Audi, SEAT & Skoda passenger car range only and not sourced from an "aftermarket" supplier.
- d. It is permissible to fit cylinder heads with 4-valves per cylinder to engines which were originally 2-valves per cylinder.

5.7.4 Location:

- a. The engine location, locating points and mounting method must remain as specified and supplied by the manufacturer for the particular model entered in the championship, except as detailed in 5.7.4.c.
- b. It is permitted to replace mounting bushes with uprated or solid material.
- c. It is permitted to modify the engine mountings in **Class A**, providing the engine location remains as specified and supplied by the manufacturer for the particular model entered in the championship.

5.7.5 Oil / Water Cooling:

- a. The oil/water cooling systems are free if Championship Regulation 5.7.5 b. to 5.7.5 f. inclusive are respected.
- b. Radiators are free but must remain in their original location.
- c. The fitting of additional water radiators is permitted provided they are located within the periphery of the bodywork.
- d. The fitting of additional oil coolers is permitted provided they are located within the periphery of the bodywork.
- e. Modification of the cooling system is permitted to facilitate the installation of items detailed in Championship Regulation 5.7.5 b. to 5.7.5 d. Inclusive.
- f. Dry sump systems are NOT permitted.

5.7.6 **Induction Systems:**

- a. Induction systems are free if Championship Regulation 5.7.6 b. to 5.7.6 h. inclusive are respected.
- b. Fuel Injection/Carburetion is 'free' in all Classes as long as power to weight as specified in Regulation 5.2.3.1 is met.
- c. No Longer Applicable
- d. Class A: Petrol engine vehicles may use any standard Turbocharger/Exhaust Manifold as fitted to any engine of that type, i.e. K03 may be replaced by K04 on 1.8T engines.
- e. **Class B:** Petrol engine vehicles must use the standard fitment Turbocharger or the engine code of the engine. This will be determined by the VW Group parts and workshop manual systems.

- f. **Class A:** -Diesel engine vehicles may use any turbocharger subject to written Championship Committee approval.
- g. Class B: PD engine vehicles must use the standard Turbocharger/Exhaust Manifold as fitted to any of the 8valve PD engines.
- h. 16valve Diesel cars must use standard Turbocharger/Exhaust Manifold as fitted to any of the 16valve diesel engines.

5.7.7 **Ignition:**

a. The ignition systems are free.

5.7.8 Fuel Delivery Systems

- The Fuel pump and number of pumps is free subject to compliance with Motorsport UK Yearbook 2021 requirements.
- b. It is permitted to modify the fuel system to allow for the installation of an alternative fuel pump. See Technical Regulation 5.7.8.a.

5.7.9 Exhaust Systems:

- a. Exhaust manifolds and systems are free if Championship Regulations 5.7.9 b. to 5.7.9 d. inclusive are respected.
- b. Side exit exhausts are permitted but must exit behind the midpoint of the wheel base.
- c. It is prohibited to pass any part of the exhaust system through the driver compartment.
- d. All cars must conform to the current MOTORSPORT UK requirements as detailed in the Motorsport UK Yearbook 2021 Regulation J5.16

5.8 **Suspension:**

5.8.1 **General:**

- a. Suspension must be controlled to avoid fouling of wheels on chassis or bodywork as detailed in the Motorsport UK Yearbook 2021 Regulation J 5.5.2.
- b. No modifications are permitted to suspension pick up points.
- c. No material is to be added or removed, or deformation to wishbones, uprights or hubs, other than those detailed in 5.8, and for the fitment of spherical bearings.

5.8.2 Suspension Components:

a. Suspension bushes are free including the use of spherical bearings. Subject to 5.8.3 a-j

5.8.3 Wishbones:

- a. Wishbones, uprights and hubs must remain standard for the model being raced, other than where detailed in 5.8.3 b. to 5.8.3 j. inclusive.
- b. It is permitted to seam weld wishbones.
- c. To avoid the risk of bottom ball joint 'necking', bottom ball joints may be bolted to the top of the wishbone rather than sandwiched inside the wishbone provided a spacer is used inside the arm similar to those fitted by VW Motorsport to VW Vento Challenge cars.
- d. Cars with front wishbones that only have a single inner mounting point may replace the front wishbones for ones with dual inner mounting points, provided the axis of the pivot is within 20mm of the standard inner pivot point, and fabricate mountings to suit. These wishbones must be the same length as standard +/-10mm.
- e. **Class A** cars are permitted to use non-standard lower front wishbones and/or front uprights, subject to the associated weight penalty listed in Technical Regulation 5.14 (Class A only) being applied.
- f. Class B cars are permitted to use uprated lower wishbone bushes, but NOT "Rose joint" type bushes.
- g. Class B cars are permitted to use solid rubber bushes, or bushes of an equivalent material.
- h. **Class B** cars are not permitted to have "rose joint" type bushes in any suspension joints, except front top bearing suspension mountings.
- i. **Class B** Mk1 Golf based chassis cars only, are permitted to use an uprated lower wishbone ball joint. The standard ball joint may be replaced with an approved pin and rose joint assembly.
- j. The standard 17mm dia. ball joint may be replaced with a 19mm dia. unit as used in a Mk. 2 Golf.

5.8.4 **Springs:**

- a. Suspension springs are free provided that they utilise the standard pick-up points on the chassis.
- b. Spring platforms may be adjustable.

5.8.5 **Shock Absorbers**:

- a. Shock Absorbers are free provided that they utilise the standard mounting / fixing points on the chassis.
- b. A telescopic damper may be converted to a coil-over damper and the redundant coil spring removed.
- **c.** Off set and/or adjustable suspension upper strut mounts are permitted provided that they utilise the standard mounting points on the body shell, original locating cones may be removed to facilitate fitment (if fitted).
- d. Class B cars are permitted to use dampers with a maximum of 2-way adjustment.

5.8.6 Anti roll bars:

- Non-standard Anti-Roll bars are allowed.
- b. Anti-Roll bars must not be adjustable from within the driver compartment.

5.9. Transmissions:

-a. No Longer Applicable-

b. Class A: -

- i. Gearbox is free providing that Championship Regulations 5.9.b. ii to vi. are respected.
- ii. The transmission configuration must remain standard for the vehicle in question i.e. front engine & front wheel drive.
- iii.. The engine and transmission must remain in the same position relative to each other as the manufacturer's original specification.
- iv. DOG type gearboxes are permitted.
- v. It is permitted to modify standard drive shafts.
- vi. Non-standard gearbox casings are only permitted subject to written Championship Committee approval.
- vii. Four Wheel Drive Is Allowed (Subject to written approval)

c. Class B: -

- i. Any standard gearbox from the Volkswagen Audi Group parts list may be used providing that Championship Regulations 5.9.c. ii and vii. are respected.
- ii. The transmission configuration must remain standard for the vehicle in question i.e. front engine & front wheel drive.
- iii.. The engine and transmission must remain in the same position relative to each other as the manufacturer's original specification.
- iv. It is permitted to use a LSD Subject to 5.14.7c.ii, and/or non-standard final drive ratio, (Using this type of final drive will incur a weight penalty).
- v. May only use standard Volkswagen Audi Group parts.
- vi. May only have the standard number of ratios as the same production road car.
- vii. Drive shafts and hubs may be from any variation of the model of car being raced.
- c. All Classes No more than 6 forward gears are permitted.

5.9.1 Traction / Launch Control

Any form of traction / launch control is prohibited.

5.10 Electrics:

5.10.1 Electrical equipment is free if Championship Regulation 5.10.2. to 5.10.5. inclusive are respected.

5.10.2 Vehicle Onboard Starter:

Engines are to be started at all times by the Vehicle Onboard Starter except that the use of an external portable slave battery is permitted to aid start up only in the paddock, assembly area, pit lane and on the grid.

5.10.3 **Battery**

- a. The battery and starter motor must be capable of performing a number of repetitive starts.
- b. The battery make and type, are free within Motorsport UK Yearbook 2021 Regulations.
- c. The Battery position and orientation is free within Motorsport UK Yearbook 2021 Regulations.

5.10.4 Charging Circuit:

The Charging Circuit must be connected and operational all times whilst the Engine is running.

5.10.5 **Lights:**

- a. All cars must be fitted with the following:
 - i) A minimum of two forward facing main headlights.
 - ii) A minimum of two rear facing red tail lights.
 - iii) A minimum of two rear facing red brake lights.
 - iv) A rear facing red high intensity fog light (or two where two are fitted as standard equipment by the vehicle manufacturer in question) Motorsport UK Yearbook 2021, Section (K) 5. applies.
- b. Lights detailed in Championship Regulation 5.10.5 a. iii) must be operated only by the brake pedal and without a delay.
- c. Lights detailed in Championship Regulation 5.10.5a. iv) must not be operated by the brake pedal.
- d. It is not permitted to tint or paint the front or rear lighting units.
- e. All lights detailed in Regulation 5.10.5 a. must be in working order throughout the entire Event and must be able to be switched on by the Driver when seated normally in the car.
- f. Front lights must be protected in accordance with Motorsport UK Yearbook 2021 Regulation Q19.14.4.
- g. The inner headlights on 4-headlamp models may be removed and replaced with mesh.
- 5.10.6 An operative front windscreen wiper must be fitted and in full working order throughout the entire Event. Motorsport UK Yearbook 2021, Regulation (Q) 19.15.3. Applies.

5.11 **Brakes:**

- a. Brake systems are free if Championship Regulation 5.11 b. to 5.11 j. inclusive are respected.
- b. Carbon disks are prohibited.
- c. ABS systems are prohibited unless fitted as standard
- d. ABS System can be removed
- e. Class A permits the use of a brake bias adjuster which may be available for adjustment by the driver at all times.
- f. Class B cars must have any brake bias valve/adjuster locked or sealed so it cannot be adjusted by the driver whilst the vehicle is in motion.
- g. After market proportioning valves may be used.
- h. Class B Brake disc diameter must be within 130% of the original standard fitment for the vehicle.
- i. Class B Only standard callipers maybe used from the VW Group range. Subject to 5.14.7 f
- j. Forward facing fog lights mounted in, or under, the front bumper may be removed. Internal bodywork or trim behind the original fog light locations may be modified solely to allow the fitment of ducting from the original fog light locations to the front brake discs. The ducting shall be for the sole purpose of cooling brakes or removing dust. If beneath the car respects the requirements of Championship Regulation 5.6.5

5.12 Wheels / Steering / Tyres:

5.12.1 Wheels:

- a. Road wheel material is free.
- b. Split rims are not permitted.
- c. Road wheels must be fastened to their hubs by the original number of studs/bolts.

5.12.2 Wheel width:

Maximum permitted wheel rim widths are: -

a. Class A

The rim suitable for a tyre of maximum width 245 section.

b. **Class B** 7.0"

5.12.7 **Steering**:

- a. Steering wheel type is free providing Motorsport UK Yearbook 2021 Regulation (J) 5.7.1.and 5.7.2.is respected.
 - b. Steering columns are free.
 - c. Steering rack must be the standard type for the model being raced
 - d. Gear ratio is free and either PAS or manual type may be used. PAS Pump is free
 - e. All PAS pumps, pipe work and bracketry may be removed.

f. If fitted with a steering lock, this should be rendered inoperative, unless the vehicle is driven to the circuit on the highway. Motorsport UK Yearbook 2021 Regulation Q 19.6 applies.

5.13 **Tyres**:

- a. Control dry weather tyre is mandatory for 2020 in Class A and B. Vehicles running in one make spec need to apply to the organisers and obtain the organisers approval, in writing if they wish to run the original tyre from that vehicles original regulations.
- b. The dry weather control tyre is a NANKANG AR1. A transition period from NANKANG AR1 to TOYO R888R tyres will be implemented During the first half of the season.

d. Class A

i. Maximum permitted tyre width is 245 section.

e. Class A, B

Vehicles are permitted to use Any Tyre from the 2021 Motorsport UK Yearbook listed 1a and 1b

- f. No modification to tread pattern or tread depth by cutting is allowed.
- g. Tyre tread depth must be above the 1.6mm legal limit prior to commencement of qualifying sessions or races.
- h. The tyre specification when new must be as supplied by the manufacturer.
- i. Tyre buffing is prohibited.
- j. The use of any heating / heat retention devices, tyre treatments and compounds is prohibited.
- k. No Longer Applicable
- I. The use of slick tyres is prohibited under these regulations
- m. The use of wet weather tyres is prohibited under these regulations.
- n. Pressure regulation valves are prohibited. Motorsport UK Yearbook 2021Regulation, ((J) 5.9.4. applies.

5.14 Vehicle Weight

5.14.1 **General:**

- a. The principle is to equalise the performance of the car and Driver combination. The minimum car/Driver weights excluding any success ballast, at the completion of every qualifying session and race must be in accordance with Championship Regulation 5.14.2 regardless of laps completed.
- b. It is forbidden to add any liquid(s) or other material(s) to the car, or to substitute any part(s) for a heavier one during qualifying session or race.
- c. If a Car loses a part during qualifying or a race, the weight of that part may be taken into account during eligibility checks. Following consultation, the Championship Eligibility Scrutineer will determine whether any lost part should be taken into account.

5.14.2 Minimum weight:

- a. The minimum weight is "in the condition in which the vehicle and the Competitor (wearing his complete racing apparel, scrutineered Race Suit, boots, gloves and helmet) including minimum Weight Ballast where applicable, (see Championship Regulation 5.14.4 crosses the finish line or at any other time during qualifying or race and without the addition or removal of any solid or fluid matter". For the purpose of the Regulation, qualifying or race is deemed to include any transfer to a place of post event scrutiny as directed by an official.
- b. The minimum Car/Driver weights for each class, at the completion of every qualifying session and race must be in accordance with the following: -

Minimum Weight = power to weight calculated value + weight penalties incurred through modifications

- i. Minimum weight will be determined by the power output of the vehicle and will be calculated by the organisers and notified to the competitor.
- ii. The calculated minimum weight will be subject to additional weight penalties for any further modifications in accordance with Appendix B.

5.15.3 Minimum weight checks:

During a Meeting, checks will be made by the Championship Eligibility / Safety Scrutineer or his appointed representative to ensure compliance with minimum weight regulations. Non-compliance at any time during the Event may be the subject of a report to the Clerk of the Course.

5.14.2 **Ballast:** Motorsport UK Yearbook 2021 Regulation (section (j) 5.15 applies)

a. Ballast required as success ballast or as a performance equalisation measure must only be added inside the car on the front and/or rear passenger foot well.

- b. It is the competitor's responsibility to provide and fit their own ballast if it is required, and to ensure that ballast is fitted in a safe manner.
- c. Ballast must be attached to the shell/chassis via at least 4 mounting points using bolts with a minimum diameter of 8mm each with steel counter plates of at least 400 sq. mm surface area and 3mm thickness. Ballast mountings must include provision for the fitting of Scrutineers wire seals.
- d. The total weight of "success ballast" carried must be declared, in writing to the Championship Eligibility Scrutineer and/or his appointed representative and be in position, at all times during practice and racing.
- e. It is permitted to locate ballast within a ballast box.
- f. The ballast box attachment to the shell/chassis must respect Motorsport UK Yearbook 2021 requirements.
- g. All ballast securing methods (Bolts or Box) must include provision for the fitting of scrutineer's wire seals.
- h. The Maximum ballast allowed is 150kg total.

5.14.5 Success Ballast:

- a. Any vehicle may be required to carry success ballast as a performance equalisation measure. Such success ballast will be specified by the Technical Committee based upon the performance of the car in competition.
- b. The Technical Committee reserves the right to review the weight handicaps at any time during the Championship.
- c. Competitors will be informed by official bulletin of the amount of weight they must carry.
- d. The maximum success ballast allocated shall be 150kg.
- e. Any vehicle which fails to carry the success ballast specified by the Technical Committee will automatically be deemed not to comply with the Technical Regulations.
- f. Competitors are required to have the facility (complying with Motorsport UK requirements) to fit additional ballast to their vehicle at any time during a race meeting.

5.14.6 Minimum weight ballast:

a. It is permitted to carry ballast to achieve minimum weight.

5.14.7 Additional weight penalty

- a. The following additional weight penalties will be applied regardless of whether the components were a standard fitment or not:
- b. The Championship Organisers reserve the right to amend the weight penalties, addition or reduction, at any time during the Championship.
- c. No Longer Applicable

d. Transmission weight penalties

- i. Use of dog type gear engagement. Additional weight penalty of 30kg
- ii. Use of a non-standard differential (LSD, ATB etc. etc.) This is applicable for Class B ONLY Additional weight penalty of 50kg.
- iii. Use of non-VAG Gears or Gear Sets (Including Final Drive) Additional weight penalty of 15kg.
- iv. Use of aftermarket sequential gear selection on a "H" pattern gearbox (SQS type) Additional weight penalty of 30kg.

e. Suspension weight penalties

- Non -standard front uprights (including Seat Sport produced units as fitted to Leon Cup Cars) –
 Additional weight penalty of 10kg.
- ii. Use of multi-link rear / Modified beam suspension (Only permitted where fitted as standard) Additional weight penalty of 20kg
- ii. Wide front track via non-standard bottom ball joints and/or non-standard lower arms Additional weight penalty of 10kg.
- iv. Increase in rear track from standard dimensions Additional weight penalty of 10kg per 0.5inch.

f. Wheels weight penalties

- i. Class A Wheels over 8 inches wide Additional weight penalty of 25kg for each 0.5 inch over 8 inch (i.e. 9" rims incur a 50kg penalty)
- ii. Class A Wheels under 8 inches wide (25kg deducted for each 0.5 inch under inch (i.e.7" rims incur a 50kg reduction in target weight)

g. Brakes weight penalties

i. Class B - Use of non-standard brakes – Additional weight penalty of 30kg.

h. Induction weight penalties

- Class B Vehicles using forced induction will be required to carry an additional weight penalty of 22kg. This additional weight shall be carried regardless of base weight/ actual weight/Class weight/Weight Penalties.
- **Class** B Vehicles running VR6 engines will be required to carry an additional weight penalty of 10kg. This additional weight shall be carried regardless of base weight/ actual weight/Class weight/Weight Penalties.
- 5.14.8 Compliance with Regulation 5.14 will be checked prior to removal of fuel samples.

5.15 Fuel Tank/Fuel:

5.15.1 **Types:**

- a. Fuel tank construction is "free" subject to compliance with Motorsport UK Yearbook 2021 Requirements.
- b. "Standard" fuel tanks may be retained. Additional baffles and/or filling with safety foam is permitted.
- c. Racing type safety fuel cell may be used. Motorsport UK Yearbook 2021 Regulation (K)4 applies.

5.15.2 **Location:**

Fuel tank/cell may be located anywhere to the rear of the driver's seat, subject to compliance with Motorsport UK Yearbook 2021 Requirements.

5.15.3 **Fuel:**

- a. The Organisers reserve the right to introduce a mandatory Championship control fuel during the course of the Championship. Until such notification is given by bulletin only petrol as defined in Section B Nomenclature & Definitions, Pump Fuel section of the Motorsport UK Yearbook 2021 and complying with BSEN228 may be used; fuel which exceeds the stated RON (max) levels in Appendix 1 of Section B Nomenclature & Definitions is prohibited even if it is sold/promoted as being legal for UK Competition and/or obtainable from 'roadside' pumps.
- b. At the end of practice and the race at least 3 litres of petrol from the tank of the competing car must be available to the scrutineers for analysis.
- c. Compliance with minimum weight for the car will be taken before the petrol is removed.
- d. A Motorsport UK approved additive is permitted.
- e. It is not permitted to use any "Octane Booster" additives.
- f. The introduction of any other media into the engine is prohibited.
- g. Refuelling is not permitted during qualifying, on the starting grid or during a race.
- h. In all cases an audit trail for all fuel purchased must be demonstrable.

5.16 Silencing:

- a. Silencers are free.
- b. Silencing must comply with Motorsport UK Yearbook 2021 Regulation J5.17 & J5.18.

5.17 Numbers and Championship Decals:

5.17.1 Positions:

- a. Race numbers must be displayed in accordance with Motorsport UK Yearbook 2021 Regulation (Q) 11.4.1. and (Q)11.4.2.
- b. The numbers for each rear side window, which shall be;
 - (i) A minimum of 200mm high
 - (ii) With a stroke width of at least 20mm
 - (iii) Coloured reflective vellow.
- c. The windscreen of all cars must display the competition number accordance with Motorsport UK Yearbook 2021 Regulation Q.11.4.2., positioned on the upper area of the passenger's side of the windscreen, as follows;
 - (i) The numerals must be at least 150mm high
 - (ii) Be in the same colour and font as those displayed on the rear side windows
 - (iii) Be placed no closer than 50mm from the lower edge of the windscreen "sun-strip" and 50mm from the side edge of the windscreen.
- d. Only competition numbers allocated by the CVWC Registrar are to be displayed. They must be displayed in accordance with Motorsport UK regulation **J4** and remain as allocated until the end of the season.

e. Current, fully paid up, racing members of the CVWC must display competition numbers. CVWC decals and those of the series sponsors, promoters and the MSVR are required to be displayed in an un-obscured position in accordance with the following table.

Item		Placement
Series Sponsor Sun strip	TBC	Top of front windscreen
Series Sponsor logos (if required - TBC)	TBC	One on each side of the car (front wing, rear door or rear quarter)
Class Letter (50mm White lettering)	e.g. 123 A	One on each of the rear side windows, adjacent to race numbers
Race number	e.g. 123	One on each of the rear side windows, One on the front windscreen

- f. Decals shall be fitted as issued. They may not be cut or otherwise defaced or deformed without prior approval from the Championship Organisers.
- g. Non CVWC approved decals such as, but not restricted to, other clubs and other championship/series decals are not to be displayed on vehicles. These should be removed or covered up.
- h. Points will ONLY be awarded to competitors correctly displaying the required decals
- i. One set of Decals may be obtained from the CVWC nominated supplier free of charge.
- j. A charge may be levied for any extra decals required to those issued in 5.17.1 i.
- k. 5.17.1 h. & 5.17.1 i. are only applicable to current fully paid up, Racing members of the CVWC.