

Porsche Carrera Cup Scandinavia Regulations 2016

Attachment 10. Special Technical Requirements MY 2010 - 2013 cars regulations.

General

Technically identical vehicles with the designation Porsche 911 GT3 Cup (Type 997), built by Porsche AG in a small production run on the basis of the Porsche 911 GT3 RS, shall be used for the PCCS shall be authorized.

The vehicles must comply with the requirements of these 2016 Technical Rules.

Technical inspection of the vehicles is undertaken by the technical scrutineers.

The following special technical requirement applies in addition to the general technical requirement in Part 2 Technical Regulations (Items 1.1 - 1.13).

Everything that is not expressly permitted in this regulation is prohibited.

Allowed changes must not result in any infringements of the rules or any changes that are not permitted.

10.1 General vehicle description

Porsche 911 GT3 Cup (Type 997), Year of manufacturing 2010-11-12-13 including the required modifications in accordance to the attachments.

10.1.1 Concept:

- Single-seated near standard race vehicle built according to Porsche Cup regulations and specification
- Based on the 911 GT3 RS 2nd generation.

10.1.2 Engine:

- Water-cooled flat six-cylinder boxer engine.
- 3797 cc, stroke 76.4 mm, bore dia. 102.7 mm.
- Max. power: 331 KW 450HP at 7500rpm.
- Max. rpm: 8500 rpm.
- Four valves per cylinder.
- Dry-sump lubrication.
- Two-stage resonance intake manifold, central air intake.
- Electronic engine management MS 3.1.
- Sequential multi-point fuel injection.
- Required fuel quality: Super Plus unleaded, 98 ROZ (AspenR is the nominated fuel).
- Racing exhausts system with lambda-probe-equipped catalytic converter (400 cubicles).
- Twin-branch centre exhaust tailpipe.

(Special made for PCCS by Ferrita with articlenumber: POK9972CUP)

10.1.3 Transmission

- Six-speed sequential dog-type gearbox.

10.1.4 Gear ratios

- bevel crown wheel 8/32 $i = 4.000$.
- 1st gear 12/38 $i = 3.17$.
- 2nd gear 15/32 $i = 2.13$.
- 3rd gear 18/31 $i = 1.72$.
- 4th gear 20/28 $i = 1.40$.
- 5th gear 23/26 $i = 1.13$.
- 6th gear 29/27 $i = 0.93$.
- Pressure-oil lubrication.
- Oil-water heat exchanger.
- Single-mass flywheel.
- Hydraulic clutch centre-release mechanism.
- 5.5 " triple-disc sintered-metal clutch.
- Limited slip differential 40/60%.
- Rear-wheel drive.

10.1.5 Body/equipment

- Self-supporting body shell made of galvanized sheet steel.
- Carbon-fibre doors with window frame and plastic rear-view mirrors.
- Carbon-fibre rear lid with adjustable rear wing.
- Welded-in roll-cage.
- Air jack system.
- Aerodynamically optimized front bumper and front spoiler cage.
- Racing seat (driver side only) with fire-retardant upholstery.
- Six-point seat belt, optimized for use with HANS System.
- Removable steering-wheel (with quick-release coupling).
- Electric fire extinguisher.
- 90-litre fuel tank or 100L FT3 Tank as homologated by Porsche.
- Safety retainer for battery fixation.

10.1.6 Suspension/Chassis

Front axle

- McPherson strut-type axle.
- Sachs gas-pressure shock absorbers.
- Double coil springs (main spring and helper spring).

- Two-piece lower control arms for camber adjustment.
- Blade-type anti-roll bar.
- Damper mounted to upright with twin-clamp system.
- Power steering with electro-hydraulic pressure feed.

Rear axle

- Multilink rear suspension with rigidly mounted subframe.
- Sachs gas-pressure shock absorbers.
- Double coil springs (main spring and helper spring).
- Two-piece lower control arms for camber adjustment.
- Reinforced, continuously variable rear axle track rod.
- Blade-type anti-roll bar.
- Suspension continuously variable (height, camber, track).

10.1.7 Brakesystem

Brakesystem with one brake master cylinder each for the front-axle brake hydraulic circuit (diameter 20.6 mm), marked orange, and the rear-axle brake hydraulic circuit (diameter 19.05mm), marked green. With adjustable bias bar.

Front axle

- Six-piston aluminium calipers, single-piece.
- Steel brakediscs partnumber 997.351.409.92 left, 997.351.410.92 right.
- Brakepads 997.351.940.91 or Pagid RS14 or Pagid RS29.

Rear axle

- Four-piston aluminium calipers, single-piece.
- Steel brakediscs partnumber 997.352.405.99 or 997.352.107.A1 left, 997.352.406.99 or 997.352.108.A1 right.
- Brakepads 997.352.930.92 or Pagid RS14 or Pagid RS29.

10.1.8 Rims/tyres**Front axle**

- Three-piece BBS centre-lock aluminium rims 9.5Jx18 ET 37.

Michelin rain tyres, size 24/64-18 P2G.

Michelin slick tyres, size 25/64-18 PORSCHE CUP N2.

Rear axle

- Three-piece BBS centre-lock aluminium rims 12Jx18 ET 30.

Michelin rain tyres, size 30/68-18 P2G.

Michelin slick tyres, size 30/68-18 PORSCHE CUP N2.

10.1.9 Electrics

- Motec display with integrated data recording.
- Battery: 12 volts, 50 Ah.
- 90 Ah generator.

10.1.10 Weight:

- My 2010 – 2013 : 1295 kg.

10.2 Engine

Engines can be called in at the instructions of the race director and the sports stewards and inspected at the entrants' expense.

10.3 Power transmission (gearbox/differential lock)

The ramp angle of the differential lock is $32^{\circ} \pm 17'$ (pull) and $45^{\circ} \pm 17'$ (push). The ramp angles are determined from the axis of rotation (Attachment 2). This results in a locking ratio of 37/52% in conjunction with the locking plates. The minimum locking torque of the differential lock is achieved when the torque, as measured at the wheel nut with blocked meshing gear , stands at 60 Nm. At no point during the racing event may the torque fall below this minimum level. When checking the torque by the technical scrutineer, the tool defined by the series organizer must be used.

10.4 Brakes (brake pads/brake discs)

Only vehicles fitted with the Porsche Steel brakes and Red brake calipers (part numbers:FL 997.351.431.90, FR 997.351.432.90, RL 997 352 457 90, RR 997.352.458.90) are permitted in the Porsche Carrera Cup. Vehicles from other racing series must be converted accordingly before the technical inspection.

10.5 Steering (steering wheel/ hub extension)

The position of the steering wheel on the front axle control arm is determined by distance washers of 3 mm. Part number: 997.341.613.9A.

Only genuine OMP and Krontec hub extensions are allowed to be installed. The longitudinal adjustment facility which is available as standard may be used. Any alteration must be permitted by the technical scrutineers.

10.6 Suspension (chassis)

The chassis may be modified within the scope of the specified setting range. All genuine parts must be retained. The maximum permissible thicknesses of the spacer washers in the front and rear axle

control arms are: Front axle: 13 mm Rear axle: 13 mm. The trailing arm axle bearing points must be left in the position in which they are delivered. Additionally, the screw positions of the trailing arms at the wishbone bearing points may not be modified (see Attachment 4) The wheel base on the left driver's site and the right vehicle site must be 2353mm +/- 5mm. The measuring points are the centered boreholes at the respective central screw.

The height of the bearing point toe rod – wheel carrier at the front and rear axle is defined by different shims. Part numbers: distance washer 2 mm 997.347.235.9A distance washer 4 mm 997.347.235.9B.

10.6.1 Anti-roll bars

The anti-roll bars are only allowed to be unhooked provided that no parts are removed in the process. Only the setting options for which the technical specifications have been provided may be used.

10.6.2 Shock absorbers/springs

Only the factory-installed Sachs shock absorbers and H&R chassis springs in their original conditions may be used.

Part numbers: Shock absorber Front axle: 997.343.041.98 Rear axle: 997.333.051.96

Main spring: Front axle 100/260: 997.343.531.90 Rear axle 130/260: 996.333.531.90

Helper spring: Front axle 75/60/43: 996.343.537.90 Rear axle 80/60/60: 997.333.537.90

10.6.3 Ground clearance

The minimum ground clearance of the ready-to-drive vehicle (with the driver in the vehicle and slick tyres in accordance with Article 10.1.8, at 2.0 bar ± 0.1 bar air pressure) must not be less than the specified dimension, as measured at the specified measuring points, at any time of the racing event.

For the entire duration of the racing event the ground clearance of the front axle is to be a minimum of 68 mm and the clearance at the rear axle a minimum of 112 mm. The measuring points (see Attachment 1) at the front axle are the mounting bolts (M14x120) of the cross member/bodywork in relation to the reference surface and the machined, in driving direction rear surface on the side section of the rear axle in relation to the reference surface. The ground clearance may be changed within the existing adjustment range.

Measuring point forward is outer/front securing bolt (M14x120) that keeps the control arm.

For the purpose of setting the measuring point on the front axle, a washer with thickness 8 mm obtained from PCCSO and can not be purchased by Porsche AG and it is the participant's responsibility to be fitted during the race weekend (Attachment 1). This results in the minimum ground clearance at the front axle of 68 mm.

Measuring method

The minimum ground clearance of the ready-to-drive vehicle is checked using a measuring plate and appropriate height gauges for the axle to be measured in each case. The measurement is checked with the ready-to-drive

vehicle including the driver onboard standing on the measuring plate. If the measuring gauges can be moved under the measuring points described above, this confirms compliance with the minimum height requirement. Any measuring tolerances will be regarded by the technical scrutineering. Verification of the vehicle ride height can also be done with Porsche AG measuring wheels. The technical scrutineers can also use instruments like calipers or a depth gauge to determine the vehicle height instead of a gauge.

Changing the ride height by altering the adjusting nuts on the struts is not permitted during qualifying.

Measurement location

The measurement is conducted on the measurement plate at the technical scrutineering. The measuring plate is available to the participating teams to check the minimum ground clearance during this period after consultation with the Technical Scrutineers. A check can also be made in the pit lane for the duration of the qualifying session.

10.7 Wheels and tyres

STCC AB's specified single tyre supplier for the Championship is Michelin (dry and wet tyres). Only tyres approved and marked by STCC AB, delivered by the specified tyre-supplier Däckproffsen in Växjö are approved for use during this championship, for practice, qualifying, warm-up and races. All new tyres which the competitor intends to use during an event, must be collected from the specified supplier in conjunction with that event. Only the version of Michelin tyres approved for the series of races may be used for the duration of the event. The tyres for the relevant event are to be obtained on site from Michelin. There are no specifications for the tyre pressure, but Michelin's recommendations and instructions should be observed. Only atmospheric air may be used to inflate the tyres. All chemical, mechanical and thermal treatment of the tyres is prohibited. The mechanical removal of rubber abrasion and stones is permitted. The use of heated covers, materials or other measures that change the temperature of the tyres is prohibited for the entire duration of an event. From the beginning of the prestart until the end of the session it is forbidden to cover the admitted tyres.

Only tyres with the following specifications may be used:

Slick tyres:

Dimensions:

Front: 25/64-18 PORSCHE CUP N2.

Rear 30/68-18 PORSCHE CUP N2.

Wet tyres:

Dimensions:

Front: 24/64-18 P2G.

Rear: 30/68-18 P2G.

A maximum of 4 new slick tires is allowed to use during a race weekend (qualifying and race). It is also allowed to sign in 4 joker tires for the entire season to be used whenever they want during the season. During free practice it is only allowed to use earlier marked tires from earlier events. For the first event it is allowed to use 4 new slicks.

The number and use of wet tyres is unlimited.

10.8 Body and dimensions

Body, exterior (including windows)

Only the genuine Porsche 911 GT3 Cup (Type 997) side and rear windows (in accordance with FIA requirements, Appendix J, Art. 257.3) in their original version are permissible.

Front Screen:

As a protection of the screen and as a safety aspect so-called "tear off screens " are permitted. The fixing will be controlled on the acceptance test and has to be removed at request of the technical scrutineers. The installation of a heated front screen is permissible.

Side window:

Part No. 997.543.011.9D.

Part No. 997.543.012.9D.

Rear window:

Part No. 997.545.111.92.

The body must be left in the condition in which it was delivered. This also means that it is not permissible to change the areas on the rear wheel housings machined in the factory. One version of front lip is approved for use on the Porsche 911 GT3 Cup (Type 997):

Front lip, Part No. 997.505.557.92b

Passenger compartment/cockpit

Seat

The seat can be adjusted by removing or adding upholstery. The original mounting (seat rail and bracket) must be retained. Changes require the consent of Porsche AG. An XL seat may optionally be used. The use of modified original seat brackets according to Attachment 3 in combination with original seat rails changed from left to right and vice versa is optionally permitted. Any alteration must be permitted by the technical scrutineers.

Ventilation in the passenger compartment

Only the factory-fitted ventilation pipe on the left-hand side of the driver and the ventilation scoop on the windscreen panel to the right are permissible for the additional cabin ventilation. The supply of air to the windscreen must not be obstructed. For additional ventilation of the passenger compartment only the existing original ventilation openings in the rear side windows are permissible.

10.9 Aerodynamic aids (rear wing)

The original position of the wing section may be changed within the specified scope for adjustment.

A gurney flap (Part No. 997.512.105.90) can be mounted on the rear wing.

The transition between rear wing and Guerney-Flap has to be fixed with a 50 mm wide 3M HeliTape (Part No. 999.911.650.40). The tape has to be fixed up to the angle/corner of the Guerney-Flap.

The Guerney-Flap must not be modified mechanically and/or painted.

10.10 Electrical equipment

Engine electronic control units.

Only the Motronic electronic control units coded and sealed by the series organizer for the races may be used throughout the entire event. The Motronic electronic control unit including the complete wiring loom must be used without modification. The series organizer or the technical scrutineer reserves the right to check or exchange the Motronic electronic control or record the engine characteristic data at any time during the event. The series organizer reserves the right to reprogram the Motronic electronic control units and to reseal the plug-in connector for reading the electronic control units at the start of an event. It is thus ensured that the status of the program and data is identical for all participating vehicles.

The use of laptops/computers in the pit lane is forbidden for teams during qualifying and the classification rounds from the “ pre start ” to the end of the “Parc Fermé”.

10.11 Fuel circuit

Standard circuit.

Fuel in accordance with Part 2 Technical Regulations Article 1.1.2.

10.12 Lubrication system

Lubricants

Engine:

MOBIL1 (Mobil 10/40W) engine oil is compulsory. All additives are prohibited.

Gearbox:

Mobilube 1SHC 75W-90 transmission oil is compulsory.

All additives are prohibited. There has to be a minimum of 3.3 litre transmission oil in the gearbox at all times.

10.13 Data transmission (telemetry, radio telephony, data recording)

The use of telemetry in the vehicle is prohibited. Use of the factory fitted data recording system manufactured by MoTeC with the designation “ GT3 Cup” is compulsory. The MoTeC system is assigned to the vehicle chassis number and must not be exchanged.

All recorded data relating to practice, to qualifying or to a classification round must be made available to the technical scrutineer or the series organizer. The installation of steering angle sensors and brake pressure sensors and expansion of the memory to 16 MB are permitted. In this case, it is absolutely essential to use genuine components manufactured by MoTeC.

10.14 Timing transponder

A permanent MyLaps TranX 260 timing transponder mounted according to Attachment 5 is compulsory.

10.14 Comments

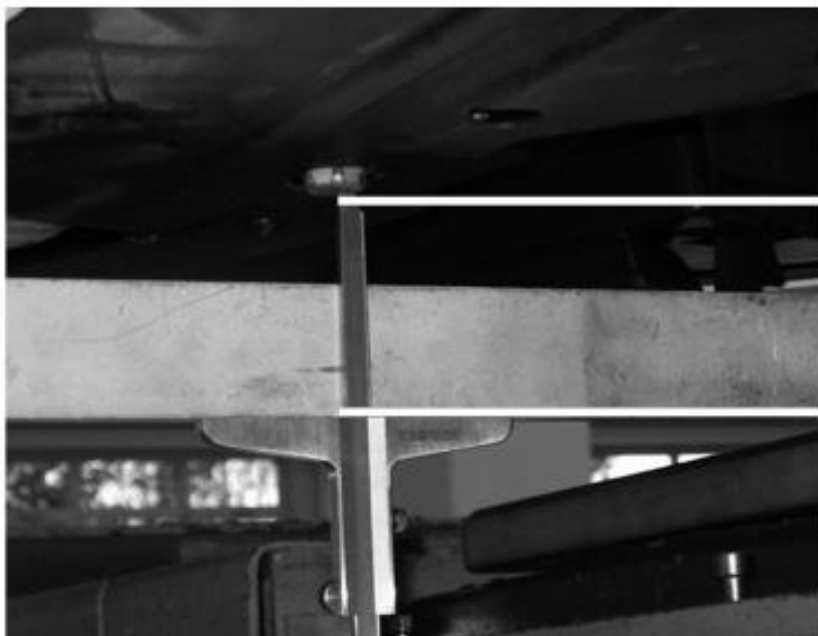
Any permitted changes may only serve the intended purpose. Should problems occur with regard to interpretation of the rules, the series organizer shall decide according to the “ essential purpose of the rules ”. The PCCS sports disciplinary bodies also have jurisdiction in such matters. The series organizer reserves the right to amend and extend these rules (in consultation with SBF).

Attachment 1 – PCCS Minimum ground clearance front

Minimum ground clearance of front axle (FA)



Measuring point



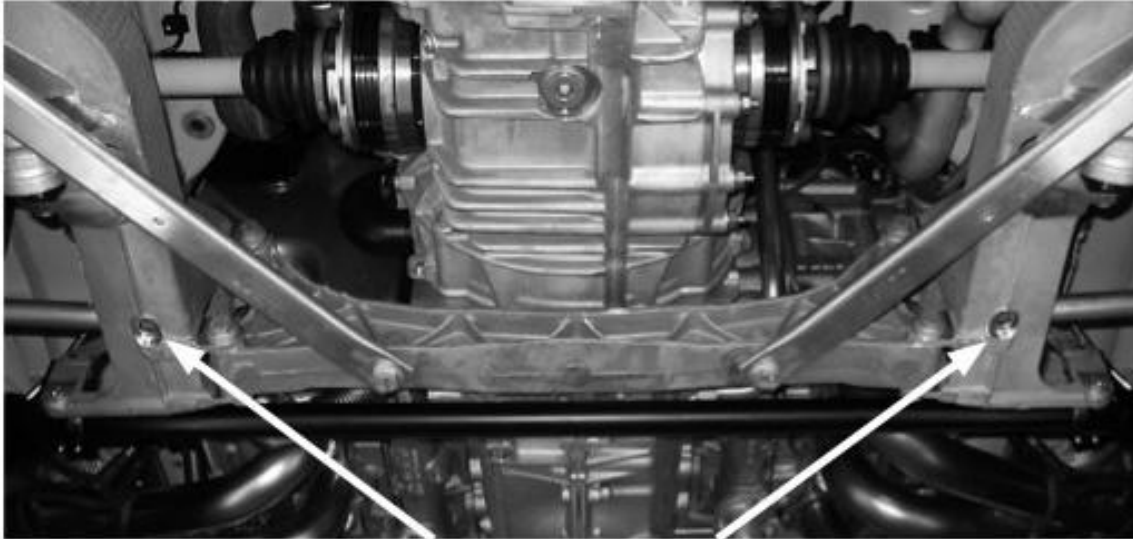
Measuring point

minimum 68 mm

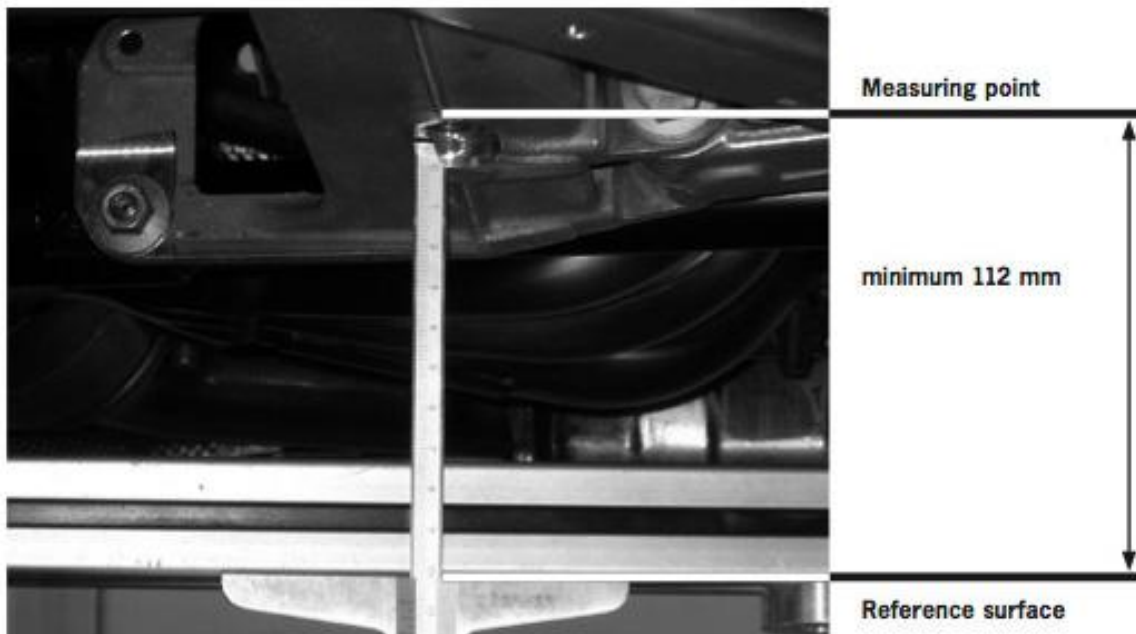
Reference surface

Attachment 1 – Minimum ground clearance rear

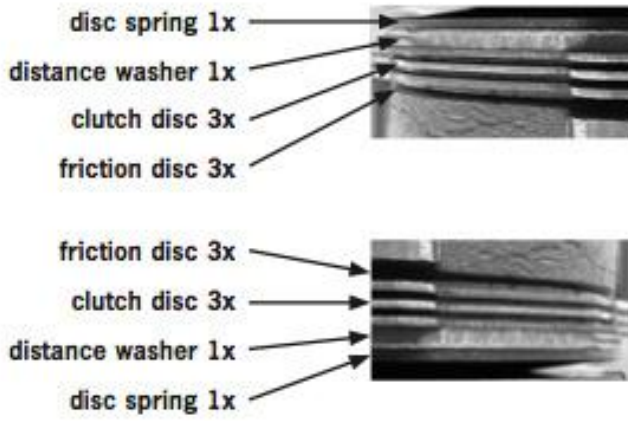
Minimum ground clearance of rear axle (RA)



Measuring point



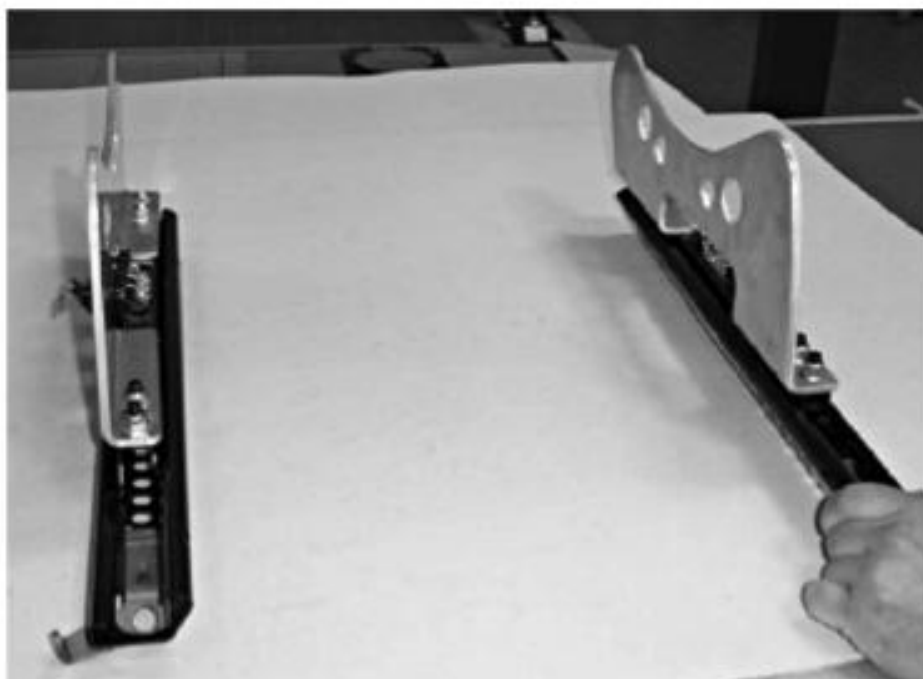
Attachment 2 - Differential



Attachment 3 – Seat



Seat rail positioning
as used to date in Cup

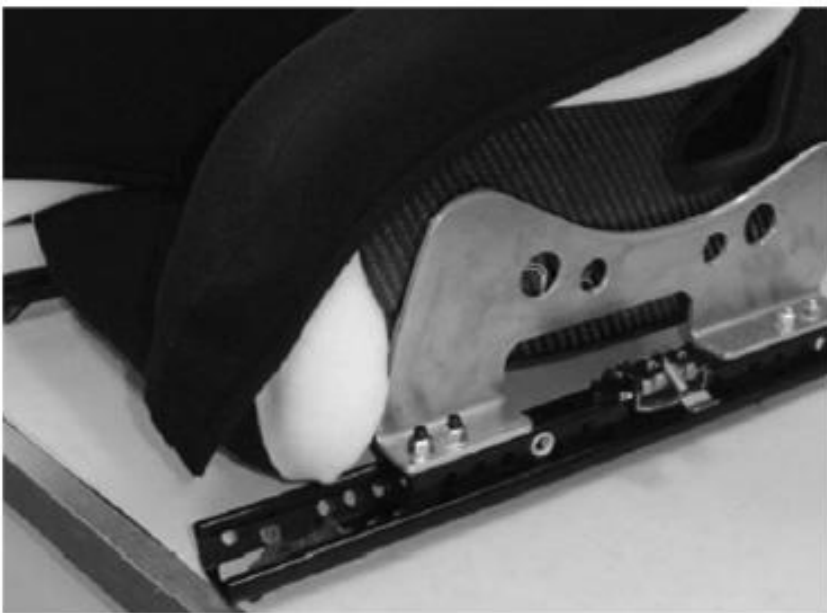


Right and left seat rails
swapped

Attachment 3 – Seat

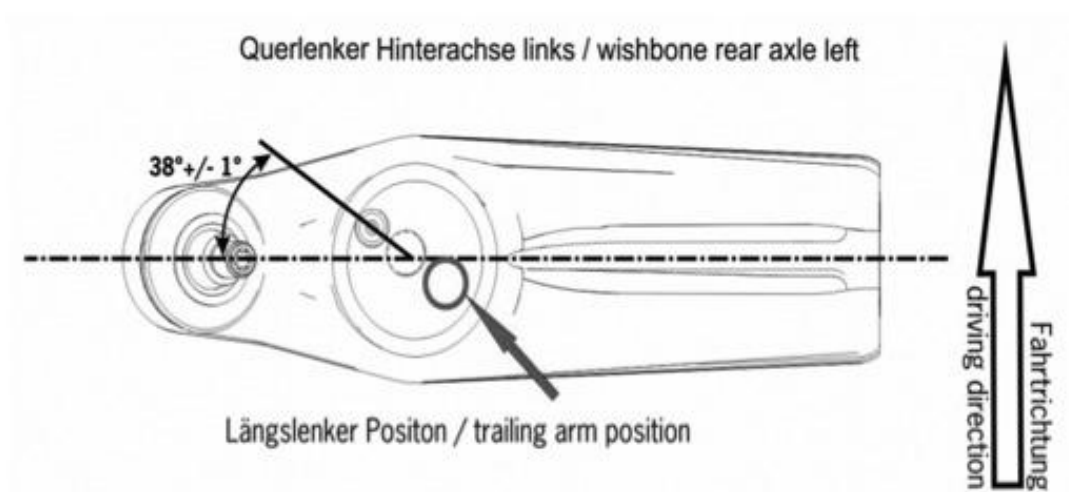
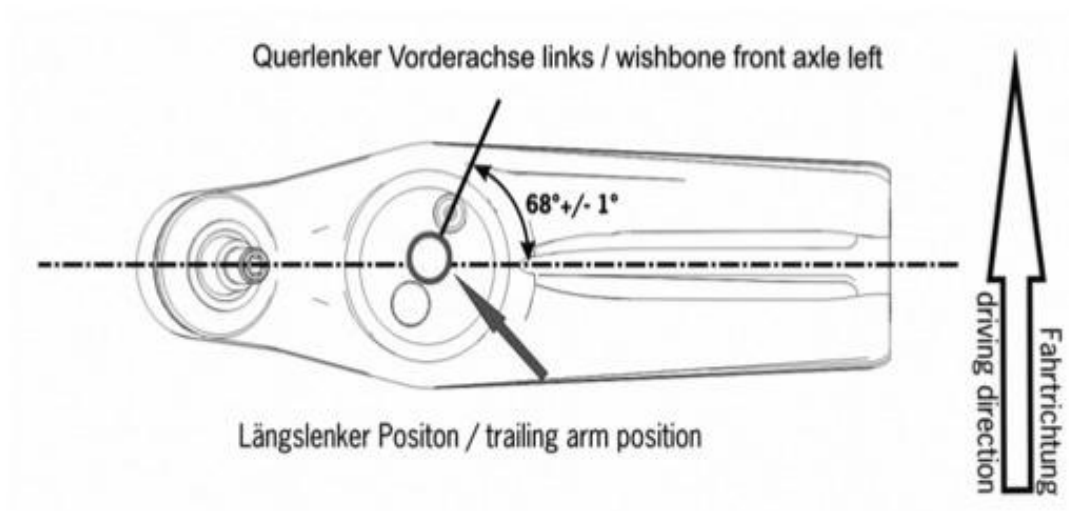


Seat rails and seat adapters fitted as previously in Cup



Seat adapters as previously (but unpainted here). Fixing holes for seat attachment lowered by max. 30 mm (with approval from OMP). Spacer of approx. 5 mm in thickness between seat shell and adapter. Only seat adapters without holes may be used for the above modification.

Attachment 4 – Wishbone



Attachment 5 - Transponderposition

