



Balance of Performance SRO GT4 CARS TRACKS C



BALANCE OF PERFORMANCE FOR SRO GT4 CARS:

TRACKS C: Estoril

These balance of performance measures are the result of the tests, research, analysis and projections performed by SRO Ltd and are the sole property of SRO Ltd. Other series promoters, race organisers and national sporting authorities cannot use all or part of them without SRO Ltd's prior written consent. Any contravention will result in a legal action.

Remarks :

- Additional BOP Ballast must be installed according to the GT4 Technical Regulations
- ECU BOP maps are saved in the dataloggers for scrutineering.
- GT4 Cars are only eligible if presented with GT4 homologation file and SRO GT4 Certificate
- SRO GT Bureau can use any parameter for BOP purposes and can change the BOP of any car at any moment during the event.
- Engine reference data (iA, Lambda, Fuel inj, Cam In/Out, airbox pressure) is the one collected during BOP tests and will be used for checks. If noted differently in comments the (e.g. iA, Lambda, Fuel inj, Cam In/Out, airbox pressure) is set as reference.
- Turbo cars without adaptable pboost identified by * in comments, need to add +10kg per 10 mbar ambient pressure delta under 1000mbar, this means + 10 kg at Patmo of 990mb, +20 kg at Patmo of 980 mbar and +30 kg at Patmo of 970 mbar
- BMW M4 GT4 G82 adapt at Patmo via LT. Reference is 1000 mbar, -1 LT must be applied per -20 mbar Patmo, this means -1 LT at Patmo of 980mb, -2 LT at Patmo of 960 mbar and -3 LT at Patmo of 940 mbar. +1 LT to be added per +15 mbar on reference, +1 LT at 1015mbar; +2 LT at 1030 mbar.
- Max static rear camber – 3,5°

Decisions taken by the SRO GT Bureau 10/07/2024



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| Make | Model | Min Weight kg | BOP Ballast kg | Total weight | Ride Height Front | BOP extra mm | Ride Height Rear | BOP Extra mm | Comments |
|--------------|----------------------|---------------|----------------|--------------|-------------------|--------------|------------------|--------------|---------------------------------------|
| Aston Martin | Vantage AMR GT4 | 1445 | +40 | 1485 | 93 | +15 | 102 | +5 | ECU BOP 2020 SRO MAP 2 |
| Aston Martin | Vantage AMR GT4 EVO | 1475 | +45 | 1520 | 93 | +15 | 102 | +5 | * MAP SRO Restr 3 ECU MAP BOP 2024 |
| Audi | R8 LMS GT4 | 1460 | +50 | 1510 | 95 | +10 | 107 | +5 | Restrictor 44 mm ECU MAP BOP 2021 |
| BMW | F82 M4 GT4 | 1430 | +35 | 1465 | 124 | +5 | 119 | +0 | *Gold Power Stick ECU BOP 2021 |
| BMW | G82 M4 GT4 | 1480 | +25 | 1505 | 138,90 | +16,10 | 149,50 | +10,50 | MAP 4 LT +0 ECU BOP 10/2022 |
| McLaren | 570S GT4 | 1425 | +25 | 1450 | 77 | +5 | 90 | +0 | *2019 MAP ECU BOP 2020 |
| Mercedes | AMG GT4 | 1400 | +60 | 1460 | 93 | +10 | 96 | +5 | POWER LEVEL 3 ECU BOP 2020 |
| Porsche | 718 Cayman GT4 RS CS | 1330 | +60 | 1390 | 97 | +5 | 100 | +0 | Restrictor 53,7mm ECU BOP 2022 |
| Toyota | GR Supra GT4 EVO | 1370 | +55 | 1425 | 165 | +15 | 165 | +10 | Silver Power Stick ECU BOP 2023 |

Decisions taken by the SRO GT Bureau 10/07/2024

TCR TECHNICAL BULLETIN

27/05/2024

The current Technical Bulletin is with immediate application, and valid until further notice (modifications in **bold**).

TCR Certified Car List:

| BRAND | MODEL | ECU Type* |
|--------------------------|----------------------|-----------|
| AlfaRomeo | Giulietta Veloce TCR | M |
| AlfaRomeo | Giulietta RF TCR | M |
| Audi | RS3 LMS SEQ | R |
| Audi | RS3 LMS DSG | R |
| Audi | RS3 LMS TCR | C |
| Cupra | TCR SEQ | R |
| Cupra | TCR DSG | R |
| Cupra | Leon Competicion TCR | C |
| Cupra | Leon VZ TCR | C |
| FIAT | Tipo TCR | M |
| Honda | Civic FK2 TCR | M |
| Honda | Civic FK7 TCR | M |
| Honda | Civic FK7 TCR | C |
| Honda | Civic FL5 TCR | C |
| Hyundai | Elantra N TCR | C |
| Hyundai | i30 N TCR | M |
| Hyundai | i30 N TCR | C |
| Hyundai | Veloster N TCR | M |
| Kia | Cee'd TCR | M |
| Lada | Vesta Sport TCR | M |
| Lada | Vesta TCR | M |
| Lada | Vesta NG TCR | C |
| Lynk&Co | 03 TCR | M |
| Lynk&Co | 03 TCR | C |
| Lynk&Co | 03 FL TCR | C |
| MG** | 5 XPOWER TCR | C |
| MG | 6 XPOWER TCR | M |
| Opel (Holden / Vauxhall) | Astra TCR | M |
| Peugeot | 308 TCR | M |
| Peugeot | 308 Racing Cup | M |
| Renault | Megane RS TCR | M |
| Subaru | WRX STI TCR | M |
| Toyota | Corolla GRS TCR | C |
| VW | Golf GTI TCR SEQ | R |
| VW | Golf GTI TCR DSG | R |

* R: Road Car ECU; M: Motorsport ECU; C: Common ECU

** Temporary Technical Form / Currently Under certification



TCR BoP & Certified Cars (Modifications in bold):

| Brand | Model | ECU Type & Power Level | Target Racing Weight | Assigned Ballast | Minimum Racing Weight | Ground Clearance |
|--------------------------|----------------------|------------------------|----------------------|------------------|-----------------------|------------------|
| Alfa-Romeo | Giulietta Veloce TCR | M5 | 1265 kg | - 10kg | 1255 kg | 70 mm |
| Alfa-Romeo | Giulietta RF TCR | M6 | 1265 kg | - 10kg | 1255 kg | 70 mm |
| Audi | RS3 LMS SEQ | R5 | 1265 kg | - 10kg | 1255 kg | 70 mm |
| Audi | RS3 LMS DSG | R6 | 1230 kg | + 20kg | 1250 kg | 70 mm |
| Audi | RS3 LMS TCR | C5 | 1265 kg | - 10kg | 1255 kg | 70 mm |
| Cupra | TCR SEQ | R5 | 1265 kg | 0kg | 1265 kg | 70 mm |
| Cupra | TCR DSG | R6 | 1230 kg | 0kg | 1230 kg | 70 mm |
| Cupra | Leon Competición TCR | C5 | 1265 kg | - 10kg | 1255 kg | 70 mm |
| Cupra | Leon VZ TCR | C5 | 1265 kg | 0kg | 1265 kg | 80 mm |
| Fiat | Tipo TCR | M5 | 1265 kg | - 10kg | 1255 kg | 70 mm |
| Honda | Civic FK2 TCR | M5 | 1265 kg | - 20kg | 1245 kg | 70 mm |
| Honda | Civic FK7 TCR | M5 | 1265 kg | + 20kg | 1285 kg | 70 mm |
| Honda | Civic FK7 TCR | C5 | 1265 kg | + 20kg | 1285 kg | 70 mm |
| Honda | Civic FL5 TCR | C5 | 1265 kg | +10kg | 1275 kg | 80 mm |
| Hyundai | i30 N TCR | M4 | 1265 kg | + 30kg | 1295 kg | 80 mm |
| Hyundai | i30 N TCR | C4 | 1265 kg | + 30kg | 1295 kg | 80 mm |
| Hyundai | Veloster N TCR | M4 | 1265 kg | + 30kg | 1295 kg | 90 mm |
| Hyundai | Elantra N TCR | C4 | 1265 kg | + 10kg | 1275 kg | 80 mm |
| KIA | Cee'd TCR | M5 | 1265 kg | - 10kg | 1255 kg | 70 mm |
| Lada | Vesta Sport TCR | M5 | 1265 kg | + 40kg | 1305 kg | 80 mm |
| Lada | Vesta TCR | M5 | 1265 kg | + 10kg | 1275 kg | 70 mm |
| Lada | Vesta NG TCR | C5 | 1265 kg | + 20kg | 1285 kg | 80 mm |
| Lynk&Co | 03 TCR | M4 | 1265 kg | 0kg | 1265 kg | 80 mm |
| Lynk&Co | 03 TCR | C4 | 1265 kg | 0kg | 1265 kg | 80 mm |
| Lynk&Co | 03 FL TCR | C4 | 1265 kg | 0kg | 1265 kg | 80 mm |
| MG | 5 XPOWER TCR | C5 | 1265 kg | 0kg | 1265 kg | 80 mm |
| MG | 6 XPOWER TCR | M5 | 1265 kg | 0kg | 1265 kg | 70 mm |
| Opel / Holden / Vauxhall | Astra TCR | M6 | 1265 kg | 0kg | 1265 kg | 70 mm |
| Peugeot | 308 TCR | M6 | 1265 kg | - 60kg | 1205 kg | 60 mm |
| Peugeot | 308 Racing Cup | M6 | 1225 kg | - 30kg | 1195 kg | 60 mm |
| Renault | Mégane RS TCR | M5 | 1265 kg | - 10kg | 1255 kg | 70 mm |
| Subaru | WRX STI TCR | M6 | 1265 kg | - 10kg | 1255 kg | 70 mm |
| Toyota | Corolla GRS TCR | C5 | 1265 kg | 0kg | 1265 kg | 70 mm |
| VW | Golf GTI TCR SEQ | R5 | 1265 kg | - 10kg | 1255 kg | 60 mm |
| VW | Golf GTI TCR DSG | R6 | 1230 kg | - 10kg | 1220 kg | 60 mm |

* R: Road Car ECU, M: Motorsport ECU, C: Common ECU; numbers 1 to 6 denominate power levels as per Technical Regulation





| Hyundai | Elantra N TCR | | | Limit Support Points | | |
|---|------------------|--------------------------------|--------------------------------|----------------------|-----------|---------|
| | | | | fEngRpm | pManifold | rLambda |
| Engine | Theta2G4KHN | | | 4000 | 2080 | - |
| ECU Make (Type) | TCR ECU (Common) | | | 4250 | 2085 | - |
| Gearbox | any | | | 4500 | 2085 | - |
| ECU Type & Power Level | C4 | | | 4750 | 2100 | - |
| Calibration File | | HY-Theta2G4KHN-C-X-S_2.1.0.clx | HY-Theta2G4KHN-C-X-S_2.2.0.clx | 5000 | 2155 | - |
| Correction [mbar/°C] | 8 | | | 5250 | 2270 | - |
| Checksum | crcAPP | 0x12346563 | 0x56B994BD | 5500 | 2395 | - |
| | crcPartSign | 0xB51ED49A | 0x44CB857B | 5750 | 2535 | - |
| | crcPartZero | 0x8EE4EC3 | 0xAE9BD74A | 6000 | 2515 | - |
| | crcPartOne | 0x68881BCC | 0xA778CE3 | 6250 | 2445 | - |
| | | | | 6500 | 2350 | - |
| <i>units: [1/min] for fEngRpm, [mbar] for pManifold</i> | | | | 6750 | 2290 | - |
| | | | | 6900 | 2240 | - |
| | | | | 7000 | 1700 | - |



| Car Model | Car Weight | Weight Car + Driver* | Car+driver+ballast** | Tyres | Tyre Size | Ride Heights | Restrictor | Regulations for other questions |
|-------------------------------------|------------|----------------------|----------------------|---------|---------------------------------------|------------------------------|--|---------------------------------|
| Porsche Cayman 981 ClubSport | 1272 Kg | 1352 Kg | 1352 Kg | Pirelli | Front: 245/645-18 Rear: 305/680-18 | Front: 70 mm Rear: 90 mm | No Restrictor 385 bhp at 7400 rpm | *1 |
| Ginetta G50 3.7 Engine | 1000 Kg | 1080 Kg | 1130 Kg | Pirelli | Front: 245/645-18 Rear: 285/645-18 | Front: 70 mm Rear: 72 mm | No Restrictor 355 bhp at 7300 rpm | *2 |
| Ginetta G50 3.5 Engine | 1000 Kg | 1080 Kg | 1080 Kg | Pirelli | Front: 245/645-18 Rear: 285/645-18 | Front: 70 mm Rear: 72 mm | No Restrictor 300 bhp | *3 |
| Porsche 997 3.6 Cup | 1200 Kg | 1280 Kg | 1380 Kg | Pirelli | Front: 265/660-18 Rear: 305/680-18 | Front: 68 mm Rear: 112 mm | Porsche Restrictor Expect 405 bhp at 7700 rpm | *4 |
| Porsche 997 3.8 Cup | 1200 Kg | 1280 Kg | 1380 Kg | Pirelli | Front: 265/660-18 Rear: 305/680-18 | Front: 68 mm Rear: 112 mm | Porsche Restrictor Expect 405 bhp at 7700 rpm | *5 |
| Porsche 991 3.8 Cup | 1225 Kg | 1305 Kg | 1405 Kg | Pirelli | Front: 285/645-18 Rear: 325/705-18 | Front: 68 mm Rear: 112 mm | Porsche Restrictor expect 390bhp at 7500rpm | *6 |
| Porsche 718 Cayman GT4 Clubsport MR | 1272 Kg | 1352 Kg | 1352 Kg | Pirelli | Front: 245/645-18 Rear: 285/645-18 | Front: 70 mm Rear: 89 mm | ECUP BOP MAP 2017 | |
| Ginetta G55 GT4 | 1140 Kg | 1210 Kg | 1230 Kg | Pirelli | Front: 245/645-18 Rear: 285/645-18 | Front: 70 mm Rear: 73 mm | 68 mm restrictor | |
| Ligier JS2 R | 1040 Kg | 1110 Kg | 1180 Kg | Pirelli | Front: 265/660-18 Rear: 265/660-18 | Front: 65 mm Rear: 72 mm | Not Applied | *7 |

**Final weight, all cars must comply with this weight at the time of the scrutineering.

*1 Considered the Homologation NAT-024 or Regulation Porsche Sprint Challenge Scandinavia 2021

*2 Considered the Homologation NAT-009 including the 2012 EVO Appendix

*3 Considered the Homologation NAT-009 including the 2012 EVO Appendix

*4 Considered Technical Regulation PCCD 2012 - Also ABS and TC Allowed

*5 Considered Technical Regulation PCCD 2013 - Also ABS and TC Allowed as well paddle shift System

*6 Considered Technical Regulation PCCD 2016 - Also ABS and TC Allowed

*7 Ligier JS Cup - Saison 2023 - Reglement Technique