



MOTORSPORT SOUTH AFRICA NPC

Reg. No 1995/005605/08

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MSA NATIONAL GTC CIRCULAR 3 OF 2017

The following amendments and additions to the 2017 MSA National GTC and GTC 2 Sporting regulations are made with immediate effect.

GTC Sporting regulations

22.8 **Balance of Performance** ~~Boost control.~~

The Controllers reserve the right to monitor and control the maximum boost pressure on all forced induction engines, regardless of the maximum boost pressure specified for the make or model in the relevant homologation documentation. Each team is responsible for controlling the boost pressure its competing car produces, which must be below that specified by the Controllers for the car in question.

The pressure pipe from the nipple in the inlet manifold to the boost monitor must not be covered and must be clearly traceable and visible for technical inspection, without removing any covers. No modification is permitted to the boost monitor systems. All nipples, connectors, elbows, pipes and other fittings used in connection with the installation of the boost monitor, are to have a minimum internal diameter of 3mm.

The boost monitor supplied by GTC in the Life system **or any other boost logger system specified by GTC** will be the sole measure of boost considered for technical compliance for the particular vehicle it is fitted to at the time. The boost pressures as recorded, are the only pressures that will be considered when checking boost pressure conformity. Boost pressure must be within the specified limits at all times from pit lane exit to pit lane entry during qualifying and racing. Boost pressure will be recorded **by calculating** a 3-second rolling average logged at 50 Hz.

22.8.2 Boost pressure:

22.8.2.1 Boost pressure for all GTC cars will not exceed 2100 mBar absolute manifold pressure as measured on the Life Data Logging system.

22.8.2.2 Boost pressure for all GTC 2 cars will not exceed the following:

- i) Mini Cooper JCW:
Maximum absolute manifold boost pressure not to exceed 2370 mBar as measured on the GTC boost data logger.
Mini with OEM turbo, OEM engine ECU, OEM intercooler and piping, Unichip piggyback fitted with ignition timing map not operational, ie. disconnected.
- ii) VW Golf 7 GTi:
Maximum absolute manifold boost pressure not to exceed 2180 mBar as measured on the GTC boost data logger.
Golf 7 with OEM turbocharger, OEM engine ECU, OEM intercooler and piping, Unichip piggyback.
- iii) VW Golf 6 GTi:

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Directors: Adv. G. T. Avvakoumides (Chairman), A. Scholtz (Chief Executive Officer), A. Taylor (Financial), P. du Toit, D. Easom, J. Fourie, G. Hall, A. Harri, M. Rowe, R. Schilling, Ms N. Singh, Ms M. Spurr
Honorary Presidents – Mrs B. Schoeman, T. Kilburn

- a) Golf 6 GTi with KO 4 turbocharger and Life Racing ECU:
Maximum absolute manifold boost pressure not to exceed 1650 mBar as measured on the GTC boost data logger.
- b) Golf 6 GTi with G 32 turbocharger and Life Racing ECU:
Maximum absolute manifold boost pressure not to exceed 1580 mBar as measured on the GTC boost data logger.

22.8.2.3 Penalties:

- The penalty for exceeding the manifold boost pressure limit is:
- i) In qualifying: drop 5 grid places for race 1 and race 2 starts.
- ii) In a race: 20 seconds added to race time.
- iii) A Joker system will be applied. Each entry gets three Jokers for the year. A Joker allows an overboost of 30 mBar in a race or qualifying, as measured on the Life Data Logging system, or any other boost logger system specified by GTC. The TC will record Jokers used.
- iv) The GTC controller's decision is final.

22.8.3 Ignition Timing:

22.8.3.1 GTC cars:

The ignition angle, **ignFinalPri1** (LifeView), shall apply as follows:

VW/Audi: **ignFinalPri1** ≤ **16** degrees

BMW: **ignFinalPri1** ≤ **16** degrees

22.8.3.2 GTC 2 cars:

- i) Mini Cooper JCW:
OEM standard.
- ii) VW Golf 7 GTi:
Not to exceed 2° in Unichip ignition timing table and OEM settings in ECU.
- iii) VW Golf 6 GTi:
Not to exceed 21° btdc as recorded in the Life Data logger and OEM specified 0° tdc reference.

22.8.3.3 Penalties:

- The penalty for exceeding the specified ignition advance limit is:
- i) In qualifying: drop 5 grid places for race 1 and race 2 starts.
- ii) In a race: 20 seconds added to race time.
- iii) The GTC controller's decision is final.

22.8.4 Ignition Offset:

22.8.4.1 GTC cars:

The following **Crank Reference Tooth Angle (ATDC)** (LifeCal) will apply:

VW/Audi: Crank Reference Tooth Angle = 291.50 degrees

BMW: Crank Reference Tooth Angle = 258.00 degrees

22.8.4.2 Penalties:

- The penalty for manipulating the specified Crank Reference Tooth Angle, is:
- i) In qualifying: drop 5 grid places for race 1 and race 2 starts.
- ii) In a race: 20 seconds added to race time.
- iii) The GTC controller's decision is final.

22.8.5 RPM limit:

22.8.5.1 GTC cars:

The engine rpm limit will be **7200** rpm maximum, as set and recorded on the Life ECU and data logger system. This is the "hard" limiter called Limiters - Rev Cut in Lifecal.

The following parameters apply:

- Limiters - Rev Cut - Engine Speed Measure = AVERAGED
- Limiters - Rev Cut - Engine Speed = 7200rpm
- Limiters - Rev Cut - Engine Speed Hysteresis = 0
- Limiters - Rev Cut - Instant Fuel Cut = YES

- Limiters - Rev Cut - Instant Ignition Cut = NO
- Limiters - Rev Cut - Omit Ignition Cut = NO

22.8.5.2 Penalties:

The penalty for exceeding the specified engine rpm limit and parameters is:

- i) In qualifying: drop 5 grid places for race 1 and race 2 starts.
- ii) In a race: 20 seconds added to race time.
- iii) The GTC controller's decision is final.

22.8.6 Anti-lag control

22.8.6.1 The following ECU anti-lag parameters are mandatory for GTC cars:

- Calibration Switches - Anti Lag Calibration Select - "OFF" (all cells to be set to "OFF")
- Calibration Switches - ALS Enable Switch - "OFF" (all cells to be set to "OFF")
- Anti-lag System - overall enable - "DISABLED"

22.8.6.2 Penalties:

The penalty for incorrect ECU anti-lag parameters is:

- i) In qualifying: drop 5 grid places for race 1 and race 2 starts.
- ii) In a race: 20 seconds added to race time.
- iii) The GTC controller's decision is final.

GTC 2 Sporting regulations

- 5.10 Dispensation has been allowed to run older cars and eventually abide by the rules without exorbitant costs, the following will be allowed

Golf 6, cars:

Carbon dash. **OK.**

Windows acrylic. - OK for now, provided minimum weight is respected.

Rear arms rose jointed. **Remain as is.**

Strut tops. As is.

Air jacks. Leave in.

Turbochargers. Convert to KO4 soonest.

Air cleaner box and ancillaries. Standard OEM.

Wheel rims 8J. Convert to 7½ J as soon as stock arrives in May



WAYNE RIDDELL

SPORTING SERVICES MANAGER

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