2025 FIA GT WORLD CUP
MACAU, NOVEMBER 13-16

From FIA Technical Delegate **Technical Bulletin 1 AMENDED**

To All competitors **Date** 25 August 2025 10:30

Powertrain Performance

The powertrain performance (power output at the wheel) must be declared by the manufacturer in the appropriate section of the 2025-2027 datasheet (Appendix VII of the homologation regulations for Grand Touring cars):

- It is a normalised function of rpm/rpm_max (rpm_max being the maximum ICE rpm)
- With ‘P0’ as the maximum power
- P1 to PXX = Reduced Power from P0 by step of 1% (kW) down to 350kW average engine power in the car speed range

The maximum powertrain performance is given for reference ambient conditions.
Power Unit usage is free (settings, modes) as far as it stays below the maximum power limit.
The datasheet with the powertrain performance must be submitted to the FIA at least three months before the competition begins.
At any time, the powertrain performance on track (power output at the wheel), will be monitored with the homologated driveshaft torquemeters and must not exceed the selected BoP power which may be adjusted for speed defined in BoP.
The torquemeters measurements will be sent to the FIA datalogger by CAN in respect of the pinout specifications in the electronic kit. Access to the kit is protected by a password which can be requested from FIA Sport at rlimasequeira@fia.com.

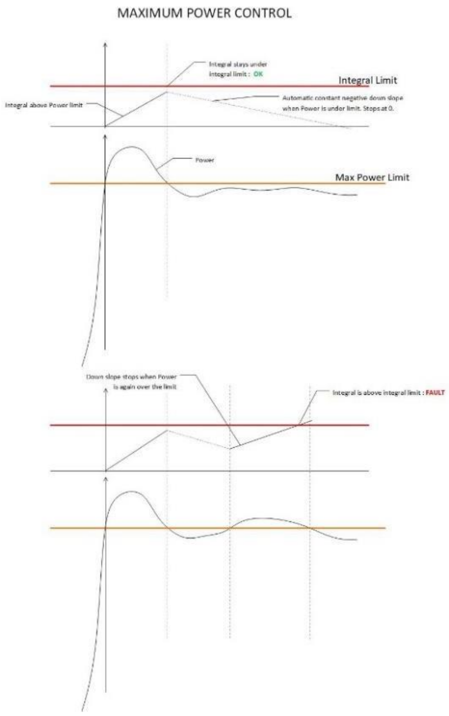
https://fiabox.fia.com/views/public/lienPublic.xhtml?id=10980&hash=79140cb2d3d458e9affe1d46884d2f8158becd96

POWER check:

- The power will be monitored using the homologated torque sensors fitted on each driveshaft.
- The Power=f(N) curve will be calculated with the following formula:

$$Power\ (t) = \left(M_{RearRightWheel}\ (t) \bullet N_{RearRightWheel}\ (t) + M_{RearLeftWheel}\ (t) \bullet N_{RearLefttWheel}\ (t)\right) \bullet \frac{\pi}{30000}$$

The reference engine speed “N” [rpm] will also be taken at time “t”. M refers to the torque [Nm].
Power(t) [kW], N(t) and the remaining channels sampling and filtering as detailed in the electronic kit.
This calculated power curve will be compared to the maximum power specified in the BoP using the logic described in the graphs below. To cover any uncontrolled or unexpected exceeding of the power limit, a maximum integral above this limit in kJ will be permitted provided it decreases by a constant slope in kJ/s when power remains below the threshold (see specific control diagrammes for details). The main channel used for monitoring will be PPUIllegal.



Strategies that result in power levels exceeding the maximum limit (as defined in the control diagrammes) are not permitted.

Control Diagrammes are used to assist the monitoring of the compliance with the technical and sporting regulations and are available at the following link. Access to the document is protected by a password which can be requested from FIA Sport at rlimasequeira@fia.com.

https://fiabox.fia.com/views/public/lienPublic.xhtml?id=10978&hash=7a46c58ae42a6be1d25c8f401d13a5ddaa02fa2f

These Control Diagrammes (algorithms) may be subject to change if necessary.

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Backup mode:

In the event of a torquemeter failure (whether due to torquemeter sensor running outside his specification, overtemperature, over torque, … or in case the sensor signal is frozen) the backup control system shall be used.
The backup control is engine-type dependent and implies a power performance deficit of the engine of 5%.

- **Naturally aspirated engine:** The control is carried out based on the maximum fuel flow value supplied by the engine control unit (ECU). See page 2 of Control Diagrammes.
- **Turbocharged engine:** The control is carried out based on a max boost pressure. See page 3 of Control Diagrammes (unchanged compared to previous years).

All other engine parameters must be operated in accordance with the engine datasheet.

The FIA Technical Delegate reserves the right to seal all electronic components of the car in order to ensure full control of the electronic setup and to verify that all CAN parameters required to be transmitted to the FIA logger are accurate and reliable.

Luca Gibello
FIA Technical Delegate