



BALANCE OF PERFORMANCE FOR SUGO



BALANCE OF PERFORMANCE FOR SUGO:

In accordance with the 2024 Japan Cup Sporting Regulations

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 organizers 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.



BALANCE OF PERFORMANCE FIA GT3 CARS



Make	FIA GT3 Homologation	Model	Min Weight	BOP Ballast	Total Weight without driver weight	Engine Restrictor size mm	Min RH Front mm	Min RH Rear mm	Lambda Fixed	Comments
Acura/Honda	GT3-047	NSX EVO2	1260	25	1285	none	66	66	0,88	Max Pboost see table
Aston Martin	GT3-051	Vantage AMR GT3 EVO	1265	40	1305	none	53	53	0,91	Max Pboost see table
Chevrolet	GT3-045	Corvette C7 GT3	1250	45	1295	1 x 53	65	71	0,88	
Ferrari	GT3-056	296 GT3	1275	35	1310	none	80	83	0,91	Max Pboost see table
Lamborghini	GT3-054	Huracan GT3 EVO2	1250	60	1310	1 x 51	70	128	0,91	
Lexus	GT3-046	RC F - GT3	1300	5	1305	2 x 40	90	280	0,86	
McLaren	GT3-052	720S GT3	1205	85	1290	none	65	70	0,88	Max Pboost see table
Mercedes	GT3-042	AMG GT3 EVO	1285	60	1345	2 x 34,5	81	87	0,93	
Nissan	GT3-048	GTR Nismo GT3	1285	35	1320	none	124	165	0,88	Max Pboost see table
Porsche	GT3-055	911 GT3-R (992)	1250	50	1300	2 x 38	101	120	0,89	



BALANCE OF PERFORMANCE FIA GT3 CARS



Maximum Pboost Limit ratio for Turbo cars

Engine speed	Acura/ Honda NSX GT3	AMR Vantage GT3 EVO	Ferrari 296 GT3	McLaren 720 S GT3	Nissan GT-R Nismo GT3
RPM	Pboost ratio @ rpm @ Lambda	Pboost ratio @ rpm @ Lambda	Pboost ratio @ rpm @ Lambda	Pboost ratio @ rpm @ Lambda	Pboost ratio @ rpm @ Lambda
4000	1.87 @ 0.88	1.56 @ 0.91	1.78 @ 0.90	1.78 @ 0.88	1.94 @ 0.88
4250			1.91 @ 0.90		
4500	1.93 @ 0.88	1.66 @ 0.91	2.06 @ 0.90	1.76 @ 0.88	1.91 @ 0.88
4750			2.48 @ 0.90		
5000	1.96 @ 0.88	1.79 @ 0.91	2.46 @ 0.90	1.73 @ 0.88	1.88 @ 0.88
5250			2.44 @ 0.90		
5500	1.98 @ 0.88	1.81 @ 0.91	2.42 @ 0.90	1.71 @ 0.88	1.85 @ 0.88
5750			2.40 @ 0.90		
6000	2.00 @ 0.88	1.83 @ 0.91	2.39 @ 0.90	1.66 @ 0.88	1.82 @ 0.88
6250			2.37 @ 0.90		
6500	2.02 @ 0.88	1.81 @ 0.91	2.35 @ 0.90	1.56 @ 0.88	1.79 @ 0.88
6750		1.80 @ 0.91	2.33 @ 0.90		
6900					1.77 @ 0.88
7000	2.01 @ 0.88	1.79 @ 0.91	2.31 @ 0.90	1.46 @ 0.88	1.51 @ 0.88
7250		1.37 @ 0.91	2.28 @ 0.90		
7500	1.99 @ 0.88		2.25 @ 0.90	1.41 @ 0.88	
7600					
8000	1.20 @ 0.88		2.12 @ 0.90	1.37 @ 0.88	
8100			1.00 @ 0.90	1.10 @ 0.88	

Decisions taken by the SRO GT Bureau 21/05/2024



BALANCE OF PERFORMANCE

FIA GT3 CARS



1. Remarks:

- 1.1 Additional weight must be installed in accordance with 2024 FIA Appendix J International Sporting Code article 257A . Driver pairing weight has to be installed in the ballast box. It should be identifiable and installed as a whole and is not part of the total weight of the car with BOP ballast.
- 1.2 In accordance with article 257A Appendix J 2024 , the use of the foam supplied by and installed following the directives from the manufacturer of the fuel cell is recommended.
- 1.3 Technical drawings of air restrictors for FIA GT3 cars are registered with FIA. Only restrictors in compliance with this registration are allowed
- 1.4 Use of catalytic converter compulsory
- 1.5 The SRO Sporting Board is allowed to modify any parameter required to establish the balance of performance cfr the Sporting Regulations.
- 1.6 Cfr the Sporting Regulations : Engine reference data (iA, Lambda, Fuel inj, Cam In/Out, airbox pressure drop, etc) and performance data (acceleration rates, V-max, aero data,...) are the ones collected during Official Tests for cars homologated prior 2024 and during the BOP and Dyno tests for the 2024 homologated cars and will be used for checks. Lambda is fixed. Fuel saving maps are not allowed!
- 1.7 Aero devices can not be covered by tape or paint.
- 1.8 Maximum rear static camber is $-3,5^{\circ}$
- 1.9 Only springs homologated in the FIA GT3 homologation file can be used for FIA GT3 -038, FIA GT3-042. FIA GT3-051 and FIA GT3-052. For FIA GT3-053, FIA GT3-054, FIA GT3-055, FIA GT3-056 and FIA GT3-058 only springs allowed by SRO Motorsports Group can be used.
- 1.10 In any case the minimum FIA RH of 50mm has to be respected for all cars.

2. Notes on boost control :

- Values are boost pressure ratio and need to be multiplied by the ambient pressure to get the Pboost limit.
- Competitors must adjust boost pressure relative to ambient pressure at each event
- Pboost limits linear interpolation approach
- Control of Pboost strategy see further.

3. Control of Pboost strategy via Series Datalogger and pressure sensors:

IF

- Throttle is $> 30\%$ open AND
- RPM is > 3000 AND
- Longitudinal Acceleration is increasing or constant or $>/0$ AND
- OVERBOOST $> \text{“Limit} + 10 \text{ mbar”}$ is recorded for more than 50ms

THEN

- Flag and report to the stewards



BALANCE OF PERFORMANCE SRO GT4 CARS



Make	Model	Min Weight kg	BOP Ballast kg	Total Weight kg without driver	Ride Height Front	BOP extra mm	Ride Height Rear	BOP Extra mm	Comments
BMW	G82 M4 GT4	1480	+30	1510	138,90	+16,10	149,50	+10,50	MAP 4 LT 0 ECU BOP 10/2022
McLaren	570S GT4	1425	+15	1440	77	+0	90	+0	°2019 MAP ECU BOP 2020
Mercedes	AMG GT4	1400	+55	1455	93	+10	96	+5	POWER LEVEL MAP 2
Porsche	718 Cayman GT4 RS CS	1330	+50	1380	97	+5	100	+0	Restrictor 53,7mm ECU BOP 2022
Toyota	GR Supra GT4	1360	+25	1385	175	+5	175	+5	Blue power stick V2 ECU BOP 2022
Toyota	GR Supra GT4 EVO	1370	+45	1415	165	+15	165	+10	Silver power stick ECU BOP 2023

Remarks :

- Additional BOP Ballast must be installed according with art. 4.2 and art 4.3 of the GT4 Technical Regulations
- ECU BOP maps are saved in the dataloggers for scrutineering.
- 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.
- Turbo cars without adaptable pboost* (McLaren 570S GT4) need to add +10kg per 20mbar ambient pressure delta under 1010mbar, this means + 10 kg at Patmo of 990mb, +20 kg at Patmo of 970 mbar and +30 kg at Patmo of 950 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 +20 mbar on reference, +1 LT at 1020 mbar; +2 LT at 1040 mbar.

Decisions taken by the SRO GT Bureau 21/05/2024