



IMSA TECHNICAL BULLETIN IWSC #19-41

To: All IMSA WeatherTech SportsCar Championship Competitors

From: IMSA Competition

Date: 02 October 2019

Re: IWSC Balance of Performance Tables

In accordance with Attachment 2 of the IMSA WeatherTech SportsCar Championship SSR, the following adjustments are made to the indicated cars. The column listed as current is the current specification after the adjustment is applied and thus the required specification for the event. These decisions come into immediate effect and are applicable until further notice.

IMSA BoP table values are based upon Manufacturer submitted data, Manufacturer agreed upon lap time sensitivities for mass and power, and IMSA's data analysis.

DPI	Vehicles	Mass		Engine						Aero	Fuel				Notes			
Manufacturer		Minimum No Fuel/Driver (kg)		Make	Volume (L)	Turbo/NA	Restrictor Diameter (mm)			Average Power Delta (kW)	Maximum RPM	Configuration	Type	Declared Lambda	Total Capacity (L)		Minimum Full Refueling Time (sec)	
		adj	current				qty.	adj	current	adj	current					λ		
Issued: 20191012 IWSC Petit Le Mans		Bulletin: TB 19-41			Date: 10/2/2019													
Acura	ARX-05		945	Acura	3.5	Turbo					7050	See Table	E20	0.89		71.0	30.0	
Cadillac	DPI-V.R	-15	945	Cadillac	5.5	NA	2		32.8		7600	See Table	E20	0.90		68.0	30.0	
Mazda	RT24-P		935	Mazda	2.0	Turbo					9300	See Table	E20	0.85		74.0	30.0	
Nissan	DPI		935	Nissan	3.8	Turbo					7100	See Table	E20	0.86		82.0	30.0	

* Aero configuration is defined via the Aero Configuration table on the following page.

Acura ARX-05

Engine Speed [rpm]	Boost Ratio	
	adj	current
2000		1.395
3200		1.395
3600		1.528
4000		1.639
4400		1.681
4800		1.732
5200		1.740
5600		1.749
6000		1.749
6200		1.739
6400		1.724
6600		1.724
6800		1.699
7050		1.668
7550		1.606
7650		1.000

Mazda RT24-P

Engine Speed [rpm]	Boost Ratio	
	adj	current
2000		2.040
5250		2.349
5750		2.366
6500		2.476
6750		2.484
7000		2.486
7250		2.489
7500		2.460
7750		2.405
8000		2.322
8250		2.261
8500		2.199
8750		2.162
9000		2.200
9800		2.000
9900		1.000

Nissan DPI

Engine Speed [rpm]	Boost Ratio	
	adj	current
2000		1.612
4000		1.612
4200		1.668
4850		1.668
5200		1.703
5500		1.770
5800		1.826
6000		1.873
6200		1.893
6400		1.878
6700		1.863
6850		1.863
6950		1.873
7100		1.873
7600		1.696
7700		1.000

DPI		DPI AERODYNAMIC CONFIGURATIONS		FRONT AERODYNAMIC CONFIGURATIONS			REAR AERODYNAMIC CONFIGURATIONS							
				Optional Front Aerodynamic Configurations are Independent			Optional Rear Aerodynamic Configurations Must be Used as a Complete Package; Mixing of Parts/Components is Forbidden							
2019/10/12 IWSC Petit Le Mans		Dive Planes	Packers / Inserts	Other	Option	Tail Wicker		Rear Wing Assembly		Rear Wing Flap			Rear Wing Flap Wicker	
Manufacturer		Permitted Options	Permitted Configurations	Permitted Options		Type	Maximum Height	Type	Maximum Angle / Position	Type	Position	Maximum Angle	Span	Maximum Height
						mm	mm		degrees			degrees	mm	mm
Acura	ARX-05	Per Technical Credential [IMSA]:	Per Technical Credential [IMSA]:	Per Technical Credential [IMSA]:	OPTION 1	Per Technical Credential [IMSA]	Removed	Per Technical Credential [IMSA]	12.4	Sprint As-Homologated [FIA]	N/A	31.7	1800	10.0
		Removed Single Double	As-Tested [IMSA]	Acura Side Wicker All Front Fender Wicker Options			16.3 Per Template 28.3 Per Template							
Cadillac	DPI-V.R	Per Technical Credential [IMSA]:	Per Technical Credential [IMSA]:	Per Technical Credential [IMSA]:	OPTION 1	Per Technical Credential [IMSA]	Removed	Sprint As-Homologated [FIA]	17.0	Sprint As-Homologated [FIA]	Rotated	28.8	1200	5.0
		Removed LDF Single	Splitter Outboard Fill-in Packers	All Side Wicker Options			8.0						1800	5.0
		Removed Single Double	Low Downforce Front Fender Insert	All Front Fender Wicker Options			30.0							
Mazda	RT24-P	Per Technical Credential [IMSA]:	Per Technical Credential [IMSA]:	Per Technical Credential [IMSA]:	OPTION 1	Per Technical Credential [IMSA]	Removed	Per Technical Credential [IMSA]	16.1 (Position 4)	Sprint As-Homologated [FIA]	2019 Opt 1	28.4	1800	10.0
		Removed 2018 Trimmed Lower 2019 Lower Opt 1 2019 Lower Opt 2 2019 Upper Opt 1 Double	Splitter Inboard Fill-in Packers Lower Front Fender Packer	Mazda Side Wicker Splitter Outboard Shoes / Footplates 2019 Footplate Update Splitter foot vane Front wheel arch side GF			20.0							
Nissan	DPI	Per Technical Credential [IMSA]:	Per Technical Credential [IMSA]:	Per Technical Credential [IMSA]:	OPTION 1	Per Technical Credential [IMSA]	Removed	Sprint As-Homologated [FIA]	15.8 (A2/MP2)	Sprint As-Homologated [FIA]	F2/LIM	36.1	None	
		Removed MDF HDF	Splitter extension	All Side Wicker Options Front Fender Wicker Option			12.5 40.0							

GTLM Vehicles		Mass		Engine				Ride Height	Rear Wing		Fuel				Notes		
Manufacturer		Minimum No Fuel/Driver (kg)		Restrictor Diameter (mm)			Average Power Delta (kW)	Maximum RPM	Minimum Ground Clearance (mm)	Min Angle (deg)	Gurney Minimum Height (mm)	Type	Minimum Lambda	Total Capacity (L)		Minimum Full Refueling Time (sec)	
		adj	current	qty.	adj.	current	adj	current	current	current	current		λ	adj	current		
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BMW	M8 GTE		1220				+4.8	7000	50.0	N/A	5.0	E20	1.08	+1.0	92.0	34.0	
Corvette	C7R GTE		1250	2		31.5		6800	50.0	N/A	10.0	E20	0.88		92.0	34.0	
Ferrari	488 GTE	-5	1250				+15.0	7000	50.0	N/A	10.0	E20	1.10	+3.0	91.0	34.0	
Ford	GT GTE		1280					7200	50.0	N/A	15.0	E20	0.90		91.0	34.0	
Porsche	911 RSR GTE		1245	2		32.2		9500	50.0	N/A	10.0	E20	0.89		95.0	34.0	

BMW M8 GTE

Engine Speed [rpm]	Boost Ratio	
	adj	current
2000		1.230
2500		1.410
3000		1.970
3500		2.210
4000		2.210
4500		2.219
5000	0.028	2.141
5250	0.027	2.065
5500	0.026	1.989
5750	0.025	1.923
6000	0.025	1.857
6500	0.024	1.796
6750	0.023	1.675
7000	0.023	1.535
7500	0.017	1.255
7600		1.000

Ferrari 488 GTE

Engine Speed [rpm]	Boost Ratio	
	adj	current
2000	0.082	1.866
4000	0.082	1.866
4800	0.075	1.863
5000	0.069	1.859
5300	0.069	1.854
5500	0.069	1.848
5700	0.068	1.836
5950	0.067	1.811
6050	0.066	1.793
6150	0.066	1.771
6300	0.064	1.735
6600	0.062	1.657
7000	0.056	1.551
7500	0.054	1.423
7600		1.000
10000		1.000

Ford GT GTE

Engine Speed [rpm]	Boost Ratio	
	adj	current
2000		1.545
4200		1.545
4900		1.544
5100		1.543
5300		1.538
5400		1.533
5500		1.526
5800		1.497
5950		1.476
6050		1.464
6150		1.453
6300		1.436
6600		1.407
7200		1.326
7700		1.264
7800		1.000

GTD Vehicles		Mass		Engine					Ride Height		Fuel				Notes	
Manufacturer		Minimum No Fuel/Driver (kg)		Restrictor Diameter (mm)			Average Power Delta (kW)	Maximum RPM		Minimum Ground Clearance (mm)		Type	Minimum Lambda	Total Capacity (L)		Minimum Full Refueling Time (sec)
		adj	current	qly.	adj	current	adj	adj	current	adj	current		λ	adj	current	
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Acura	NSX GT3		1350						7500		50.0	IMSA 100	0.88		107.0	40.0
Audi	R8 LMS GT3		1335	2		41.0			8500		50.0	IMSA 100	0.91		98.0	40.0
BMW	M6 GT3		1305						7250		50.0	IMSA 100	0.92		102.0	40.0
Ferrari	488 GT3		1315						7500		50.0	IMSA 100	0.92		96.0	40.0
Lamborghini	Huracan GT3		1320	2		40.0			8500		50.0	IMSA 100	0.89		97.0	40.0
Lexus	RC F GT3		1380	2		38.0			7200		50.0	IMSA 100	0.86		101.0	40.0
McLaren	720S GT3		1255						8000		50.0	IMSA 100	0.88		106.0	40.0
Mercedes	AMG GT3		1380	2		35.5			7700		55.0	IMSA 100	0.88		101.0	40.0
Porsche	911 GT3 R	+10	1315	2		45.0			9500		50.0	IMSA 100	0.88		95.0	40.0

Acura NSX GT3

Engine Speed	Boost Ratio	
	adj	current
[rpm]		
2000		1.765
4000		1.765
4500		1.768
5000		1.815
5500		1.888
6000		2.004
6200		2.033
6300		2.043
6400		2.046
6500		2.044
6600		2.039
6700		2.027
6800		2.011
7000		1.978
7500		1.917
7800		1.000

BMW M6 GT3

Engine Speed	Boost Ratio	
	adj	current
[rpm]		
2000		1.591
3000		1.799
4000		1.956
4500		2.009
4750		2.029
5000		2.049
5250		2.018
5500		1.984
5750		1.928
6000		1.895
6250		1.855
6500		1.825
6750		1.737
7000		1.677
7250		1.604
7500		1.000

Ferrari 488 GT3

Engine Speed	Boost Ratio	
	adj	current
[rpm]		
2000		1.424
4000		1.424
4500		1.479
4750		1.511
5000		1.548
5250		1.588
5500		1.646
5750		1.681
6000		1.691
6250		1.682
6500		1.647
6750		1.603
7000		1.561
7250		1.516
7500		1.474
7800		1.000

McLaren 720S GT3

Engine Speed	Boost Ratio	
	adj	current
[rpm]		
2000		1.709
4000		1.709
4500		1.702
5000		1.696
5500		1.689
5750		1.670
6000		1.650
6250		1.621
6500		1.591
6750		1.547
7000		1.503
7250		1.468
7500		1.434
7750		1.429
8000		1.424
8300		1.000