



## IMSA TECHNICAL BULLETIN IWSC #19-21

To: All IMSA WeatherTech SportsCar Championship Competitors

From: IMSA Competition

Date: 03 April 2019

Re: IWSC Balance of Performance Tables

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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		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	adj		
Issued: 20190412 IWSC Long Beach		Bulletin: TB 19-21			Date: 4/3/2019													
Acura	ARX-05	-20	920	Acura	3.5	Turbo				+9.0	7050	See Table	E20	0.89	-5.0	71.0	30.0	
Cadillac	DPI-V.R	+10	960	Cadillac	5.5	NA	2	0.0	31.9		7600	See Table	E20	0.90	-4.0	66.0	30.0	
Mazda	RT24-P	-5	910	Mazda	2.0	Turbo				-9.4	9300	See Table	E20	0.85	-1.0	76.0	30.0	
Nissan	DPI	0	935	Nissan	3.8	Turbo				+12.5	7100	See Table	E20	0.86	0.0	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	0.038	1.732
5200	0.038	1.740
5600	0.038	1.749
6000	0.038	1.749
6200	0.038	1.739
6400	0.038	1.724
6600	0.038	1.724
6800	0.037	1.699
7050	0.036	1.668
7550	0.035	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		2.483
7500		2.513
7750	-0.061	2.507
8000	-0.059	2.421
8250	-0.058	2.358
8500	-0.056	2.294
8750	-0.055	2.255
9000	-0.056	2.295
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	0.033	1.873
6200	0.067	1.893
6400	0.066	1.878
6700	0.066	1.863
6850	0.066	1.863
6950	0.066	1.873
7100	0.066	1.873
7600	0.060	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							
20190412 IWSC Long Beach		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 Double	Splitter Outboard Fill-in Packers Low Downforce Front Fender Insert	All Side Wicker Options All Front Fender Wicker Options			8.0 30.0						1800	5.0
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				Rear Wing			Fuel				Notes	
Manufacturer		No Fuel/Driver (kg)		Restrictor Diameter (mm)			Average Power Delta (kW)	Maximum RPM	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		λ	adj	current		
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BMW	M8 GTE	0	1220					7000	N/A	5.0	E20	1.08	0.0	86.0	34.0	
Corvette	C7R GTE	0	1240	2	0.0	31.5		6800	N/A	10.0	E20	0.88	0.0	92.0	34.0	
Ferrari	488 GTE	0	1255					7000	N/A	10.0	E20	1.10	0.0	88.0	34.0	
Ford	GT GTE	0	1275				-5.3	7200	N/A	15.0	E20	0.90	-1.0	89.0	34.0	
Porsche	911 RSR GTE	-10	1245	2	0.0	32.2		9500	N/A	10.0	E20	0.89	-2.0	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		2.090
5250		2.014
5500		1.937
5750		1.871
6000		1.805
6500		1.745
6750		1.622
7000		1.483
7500		1.221
7600		1.000

Ferrari 488 GTE

Engine Speed [rpm]	Boost Ratio	
	adj	current
2000		1.784
4000		1.784
4800		1.787
5000		1.790
5300		1.785
5500		1.779
5700		1.768
5950		1.744
6050		1.727
6150		1.705
6300		1.671
6600		1.595
7000		1.495
7500		1.369
7600		1.000
10000		1.000

Ford GT GTE

Engine Speed [rpm]	Boost Ratio	
	adj	current
2000	-0.023	1.515
4200	-0.023	1.515
4900	-0.023	1.514
5100	-0.023	1.513
5300	-0.023	1.509
5400	-0.023	1.504
5500	-0.022	1.498
5800	-0.022	1.468
5950	-0.022	1.448
6050	-0.022	1.436
6150	-0.021	1.425
6300	-0.021	1.409
6600	-0.021	1.380
7200	-0.020	1.300
7700	-0.019	1.240
7800		1.000