IMSA TECHNICAL BULLETIN IWSC #17-07 REVISION 1.0

To: All IMSA WeatherTech SportsCar Championship Competitors

From: IMSA Competition

Date: 4 January 2017

Re: 20170106 IWSC Daytona ROAR: P, PC, GTLM, and GTD Balance of Performance Tables UPDATED

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 has determined the values listed in all tables based upon Manufacturer submitted data and IMSA's data analysis.

P	Vehicles		Mass		Engine								Aero	Fuel							Notes
	Manufacturer		No Fuel/Driver (kg)		Make	Volume (L)	Turbo/NA	Restrictor (mm)			Boost Ratio		Configuration	Type	Minimum Lambda	Tank Capacity (L)		Refueling Restrictor (mm)			
			adj	current				qty.	adj	current	current				λ	adj	current	adj	current		
	Event:	20161230 IWSC Daytona ROAR			Bulletin:	TB 17-07		Date:	12/30/2016												
	Cadillac	DPi-V.R	0	930	Cadillac	6.2	NA	2		33.1			Daytona	E20	0.92	0	75.0		TBD		
	Dallara	P217	0	930	Gibson	4.2	NA						Daytona	E20		0	75.0		TBD		
	Mazda	RT24-P	0	930	Mazda	2.0	Turbo				See Table		Daytona	E20	0.88	0	75.0		TBD		
	Multimatic Riley	Riley MK30	0	930	Gibson	4.2	NA						Daytona	E20		0	75.0		TBD		
	Nissan	DPi	0	930	Nissan	3.8	Turbo				See Table		Daytona	E20	0.85	0	75.0		TBD		
	Onroak	Ligier JS P217	0	930	Gibson	4.2	NA						Daytona	E20		0	75.0		TBD		
	ORECA	07	0	930	Gibson	4.2	NA						Daytona	E20		0	75.0		TBD		

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

Mazda RT24-P

Engine Speed	Boost Ratio
[rpm]	
2000	2.671
5200	2.671
5800	2.304
6000	2.304
6250	2.422
6500	2.510
6900	2.709
7000	2.738
7150	2.757
7300	2.737
7500	2.700
7800	2.643
8100	2.623
8300	2.551
8800	2.304
8900	1.000

Nissan DPi

Engine Speed	Boost Ratio
[rpm]	
2000	1.650
4000	1.650
4200	1.705
4850	1.705
5200	1.740
5500	1.805
5800	1.860
6000	1.885
6200	1.890
6400	1.875
6700	1.860
6850	1.860
6950	1.870
7100	1.870
7600	1.700
7700	1.000

P	PROTOTYPE 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										
	20170106 IWSC Daytona ROAR		Dive Planes	Packers / Inserts	Other	Option	Body Gurney		Rear Wing Assembly			Rear Wing Flap			Rear Wing Flap Gurney	
	Manufacturer		Permitted Options	Permitted Configurations	Permitted Options		Type	Minimum Height	Type	Position	Minimum Angle	Type	Position	Minimum Angle	Span	Minimum Height
							mm	mm			degrees			degrees	mm	mm
	Cadillac	DPi-V.R	**As-Tested [IMSA]:** Removed Trimmed Lower Single Double	**As-Tested [IMSA]:** Splitter Outboard Fill-in Packers Low Downforce Front Fender Insert	**As-Tested [IMSA]:** All Side Gurney Options	OPTION 1	As-Tested [IMSA]	30.0	Sprint As-Homologated [FIA]		15.0	Sprint As-Homologated [FIA]			1200	10.0
	Mazda	RT24-P	**As-Tested [IMSA]:** Removed Trimmed Lower Single Double	**As-Tested [IMSA]:** Splitter Inboard Fill-in Packers Lower Front Fender Packer	**As-Tested [IMSA]:** All Side Gurney / Bootscraper Options Splitter Outboard Shoes / Footplates	OPTION 1	As-Tested [IMSA]	20.0	As-Tested [IMSA]	H4	2.0	Short Chord As-tested [IMSA]	H4	32.7	None	
						OPTION 2		65.0		H1	-2.5		H1	28.2		
	Multimatic Riley	Riley MK30	**All Options As-Homologated [FIA]**			OPTION 1	As-Homologated [FIA]	65.0	Sprint As-Homologated [FIA]	H1	-2.5	Sprint As-Homologated [FIA]	H1	28.2	Integrated	
						OPTION 2	Removed									
	Nissan	DPi	**As-Tested [IMSA]:** Removed Single Double	**As-Tested [IMSA]:** Low Downforce Splitter Packer/Trim	**As-Tested [IMSA]:** All Side Gurney Options	OPTION 1	As-Tested [IMSA]	12.5	Sprint As-Homologated [FIA]	MP Fixing 7.3 [A3/MP1]		Sprint As-Homologated [FIA]	F1/LIM		None	
	Onroak	Ligier JS P217	**All Options As-Homologated [FIA]**			OPTION 1	As-Homologated [FIA]	12.5	Sprint As-Homologated [FIA]	MP Fixing 7.3 [A3/MP1]		Sprint As-Homologated [FIA]	F4/0		None	
						OPTION 2	Removed			MP Fixing 11.3 [A2/MP1]						
	ORECA	07	**All Options As-Homologated [FIA]**			OPTION 1	As-Homologated [FIA]	Variable 16.3 to 34.0	Sprint As-Homologated [FIA]		-5.0	Sprint As-Homologated [FIA]		25.3	Full	10.0
						OPTION 2	Removed				-1.4			30.1		

As-Homologated [FIA]: Configuration as-represented by current draft Homologation submitted to IMSA

As-Tested [IMSA]: Configuration as-presented at December 2016 Prototype wind tunnel evaluation

PC	Vehicles		Mass		Engine						Aerodynamics	Fuel					Notes
	Manufacturer		No Fuel/Driver (kg)		Make	Volume (L)	Turbo/NA	Restrictor (mm)			Rear Wing Position	Type	Tank Capacity (L)		Refueling Restrictor (mm)		
			adj	current				qty.	adj	current			adj	current	adj	current	
	Event: 20161230 IWSC Daytona ROAR				Bulletin: TB 17-07			Date: 12/30/2016									
	ORECA	FLM-09	0	910	Chevrolet	6.2	NA	None			>= P4	IMSA100	0	85.0	0.0	33.5	Rear Wing setting as specified in Technical Manual, P4: Minimum Angles: Wing = -9.8°, Flap = 19.8°

GTLM	Vehicles		Mass		Engine				Rear Wing		Fuel								Notes
	Manufacturer		No Fuel/Driver (kg)		Restrictor (mm)			Boost Ratio	Min Angle (deg)	Minimum Height (mm)	Type	Declared Minimum Lambda	Tank Capacity (L)		Refueling Restrictor (mm)				
			adj	current	qty.	adj.	current			current		λ	adj	current	Type	adj	current		
	Event: 20161230 IWSC Daytona ROAR				Bulletin: TB 17-07			Date: 12/30/2016											
	BMW	M6 GTLM	0	1230				See Table	3.0	15.0	E20	0.96	0.0	101.0	Dan Jones		TBD		
	Corvette	C7R GTE	0	1240	2	0.0	29.9		0.0	10.0	E20	0.88	0.0	89.0	ATL		TBD		
	Ferrari	488 GTE	0	1250				See Table	0.0	10.0	E20	1.10	0.0	84.0	Dan Jones		TBD		
	Ford	GT GTE	0	1265				See Table	1.0	15.0	E20	0.90	+2.0	90.0	ATL		TBD		
	Porsche	911 RSR GTE	0	1240	2	0.0	31.2		0.0	10.0	E20	0.89		92.0			TBD		

* All engine restrictor geometry must comply with the FIA homologated design and be registered and approved by IMSA prior to competition.

BMW M6 GTLM

Engine Speed	Boost Ratio
[rpm]	
2000	1.488
2500	1.659
3000	1.814
3500	1.893
4000	1.912
4500	1.939
5000	1.939
5250	1.917
5500	1.873
5750	1.823
6000	1.773
6250	1.714
6500	1.653
6750	1.599
7250	1.484
7350	1.000

Ferrari 488 GTE

Engine Speed	Boost Ratio
[rpm]	
2000	1.787
4000	1.787
4250	1.773
4500	1.757
4750	1.724
5000	1.709
5250	1.732
5500	1.742
5750	1.717
6000	1.678
6250	1.633
6500	1.577
6750	1.513
7000	1.449
7500	1.321
7600	1.000

Ford GT GTE

Engine Speed	Boost Ratio
[rpm]	
2000	1.513
4200	1.513
4900	1.512
5100	1.511
5300	1.507
5400	1.502
5500	1.495
5800	1.466
5950	1.446
6050	1.434
6150	1.423
6300	1.407
6600	1.378
7200	1.299
7700	1.238
7800	1.000

GTD	Vehicles		Mass		Engine						Ride Height		Fuel							Notes
	Manufacturer		No Fuel/Driver (kg)		Restrictor (mm)			Boost Ratio	Maximum RPM		Minimum Ground Clearance (mm)		Type	Declared Minimum Lambda	Tank Capacity (L)		Refueling Restrictor (mm)			
			adj	current	qty.	adj	current		adj	current	adj	current		λ	adj	current	Type	adj	current	
Event:	20170106 IWSC Daytona ROAR				Bulletin:	TB 17-07		Date:	12/30/2016											
	Acura	NSX GT3	0	1320				See Table	0	7500	0	50.0	IMSA 100	0.87		98.0			TBD	
	Aston Martin	V12 Vantage GT3	+50	1300	2	0.0	40.7		0	7700	0	50.0	IMSA 100	0.90	0.0	108.0	ATL		TBD	
	Audi	R8 LMS GT3	0	1315	2	0.0	40.0		0	8500	0	50.0	IMSA 100	0.91	0.0	90.0	Krontec		TBD	
	BMW	M6 GT3	0	1325				See Table	0	7250	0	50.0	IMSA 100	0.92	0.0	105.0	Krontec		TBD	
	Ferrari	488 GT3	0	1325				See Table	0	7500	0	50.0	IMSA 100	0.92	0.0	95.0	ATL		TBD	
	Lamborghini	Huracan GT3	0	1320	2	-1.0	39.0		0	8500	0	50.0	IMSA 100	0.91	0.0	90.0	Krontec		TBD	
	Lexus	RC F GT3	0	1320	2	0.0	37.0		0	7200	0	50.0	IMSA 100	0.86		94.0			TBD	
	Mercedes	AMG GT3	0	1320	2	0.0	36.0		0	7900	0	50.0	IMSA 100	0.88		106.0			TBD	
	Porsche	911 GT3 R	0	1305	2	2.0	40.0		0	9500	0	50.0	IMSA 100	0.88	0.0	89.0	Krontec		TBD	

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Acura NSX GT3

Engine Speed	Boost Ratio
[rpm]	
2000	1.715
4000	1.715
4500	1.718
5000	1.757
5500	1.819
6000	1.885
6200	1.935
6300	1.962
6400	1.984
6500	1.992
6600	1.991
6700	1.980
6800	1.964
7000	1.931
7500	1.872
7800	1.000

BMW M6 GT3

Engine Speed	Boost Ratio
[rpm]	
2000	1.595
3000	1.803
4000	1.960
4500	2.014
4750	2.034
5000	2.054
5250	2.023
5500	1.989
5750	1.933
6000	1.900
6250	1.860
6500	1.829
6750	1.741
7000	1.682
7250	1.608
7550	1.000

Ferrari 488 GT3

Engine Speed	Boost Ratio
[rpm]	
2000	1.460
4000	1.460
4500	1.517
4750	1.549
5000	1.587
5250	1.629
5500	1.669
5750	1.699
6000	1.709
6250	1.700
6500	1.665
6750	1.620
7000	1.578
7250	1.532
7500	1.490
7800	1.000