

## 2020 TCR TECHNICAL BULLETIN no. 10 / 2020-08-27

This decision is with immediate application and valid until further notice.

TCR BoP & Certified Cars (Modifications in bold):

Brand	Model	ECU Type & Power Level	Target Racing Weight	Assigned Ballast	Minimum Racing Weight	Ground Clearance
Alfa-Romeo	Giulietta Veloce TCR	M5	1265 kg	- 10kg	1255 kg	70 mm
Alfa-Romeo	Giulietta RF TCR	M6	1265 kg	- 10kg	1255 kg	70 mm
Audi	RS3 LMS SEQ	R5	1265 kg	- 10kg	1255 kg	60 mm
Audi	RS3 LMS DSG	R6	1230 kg	+ 20kg	1250 kg	70 mm
Cupra	TCR SEQ	R5	1265 kg	- 10kg	1255 kg	60 mm
Cupra	TCR DSG	R6	1230 kg	+ 0kg	1230 kg	70 mm
Cupra	Leon Competición TCR	C5	1265 kg	+ 40kg	1305 kg	<b>70 mm</b>
Honda	Civic FK2 TCR	M5	1265 kg	+ 0kg	1265 kg	70 mm
Honda	Civic FK7 TCR	M5	1265 kg	+ 40kg	1305 kg	70 mm
Hyundai	i30 N TCR	M3	1265 kg	+ 40kg	1305 kg	90 mm
Hyundai	Veloster N TCR	M3	1265 kg	+ 50kg	1315 kg	90 mm
KIA	Cee'd TCR	M5	1265 kg	- 10kg	1255 kg	70 mm
Lada	Vesta Sport TCR	M5	1265 kg	+ 40kg	1305 kg	80 mm
Lada	Vesta TCR	M5	1265 kg	+ 10kg	1275 kg	70 mm
Lynk&Co	03 TCR	M4	1265 kg	+ 60kg	1325 kg	80 mm
MG	6 XPOWER TCR	M5	1265 kg	+ 0kg	1265 kg	80 mm
Opel	Astra TCR	M6	1265 kg	<b>+ 10kg</b>	<b>1275 kg</b>	70 mm
Peugeot	308 TCR	M6	1265 kg	- 10kg	1255 kg	70 mm
Peugeot	308 Racing Cup	M6	1225 kg	- 10kg	1215 kg	70 mm
Renault	Mégane RS TCR	M5	1265 kg	- 10kg	1255 kg	60 mm
Subaru	STI TCR	M6	1265 kg	- 10kg	1255 kg	70 mm
VW	Golf GTI TCR SEQ	R5	1265 kg	- 10kg	1255 kg	60 mm
VW	Golf GTI TCR DSG	R6	1230 kg	+ 0kg	1230 kg	70 mm

For any TCR Series or class with a participation of DSG cars over the 40% of the total number of cars on grid, the Target Racing Weight of the SEQ cars may be increased by the Series Promoter from 10 to 40 kg maximum. Promoters are requested to inform WSC in written form.

BoP for ENDURANCE races only (Modifications in bold):

Brand	Model	ECU Type & Power Level	<u>Endurance Target Racing Weight</u>	Assigned Ballast	<u>Endurance Minimum Weight</u>	Ground Clearance
Alfa-Romeo	Giulietta Veloce TCR	M5	<b>1250 kg</b>	<b>- 5kg</b>	1245 kg	70 mm
Alfa-Romeo	Giulietta RF TCR	M6	<b>1250 kg</b>	<b>- 5kg</b>	1245 kg	70 mm
Audi	RS3 LMS SEQ	R5	<b>1250 kg</b>	<b>- 5kg</b>	1245 kg	60 mm
Audi	RS3 LMS DSG	R6	<b>1240 kg</b>	<b>+ 10kg</b>	1250 kg	70 mm
Cupra	TCR SEQ	R5	<b>1250 kg</b>	<b>- 5kg</b>	1245 kg	60 mm
Cupra	TCR DSG	R6	<b>1240 kg</b>	+ 0kg	1240 kg	70 mm
Cupra	Leon Competición TCR	C5	<b>1250 kg</b>	<b>+ 20kg</b>	1270 kg	<b>70 mm</b>
Honda	Civic FK2 TCR	M5	<b>1250 kg</b>	+ 0kg	1250 kg	70 mm
Honda	Civic FK7 TCR	M5	<b>1250 kg</b>	<b>+ 20kg</b>	1270 kg	70 mm
Hyundai	i30 N TCR	M3	<b>1250 kg</b>	<b>+ 20kg</b>	1270 kg	90 mm
Hyundai	Veloster N TCR	M3	<b>1250 kg</b>	<b>+ 25kg</b>	1275 kg	90 mm
KIA	Cee'd TCR	M5	<b>1250 kg</b>	<b>- 5kg</b>	1245 kg	70 mm
Lada	Vesta Sport TCR	M5	<b>1250 kg</b>	<b>+ 20kg</b>	1270 kg	80 mm
Lada	Vesta TCR	M5	<b>1250 kg</b>	<b>+ 5kg</b>	1255 kg	70 mm
Lynk&Co	03 TCR	M4	<b>1250 kg</b>	<b>+ 30kg</b>	1280 kg	80 mm
MG	6 XPOWER TCR	M5	<b>1250 kg</b>	+ 0kg	1250 kg	80 mm
Opel	Astra TCR	M6	<b>1250 kg</b>	<b>+ 5kg</b>	1255 kg	70 mm
Peugeot	308 TCR	M6	<b>1250 kg</b>	<b>- 5kg</b>	1245 kg	70 mm
Peugeot	308 Racing Cup	M6	<b>1210 kg</b>	<b>- 5kg</b>	1205 kg	70 mm
Renault	Mégane RS TCR	M5	<b>1250 kg</b>	<b>- 5kg</b>	1245 kg	60 mm
Subaru	STI TCR	M6	<b>1250 kg</b>	<b>- 5kg</b>	1245 kg	70 mm
VW	Golf GTI TCR SEQ	R5	<b>1250 kg</b>	<b>- 5kg</b>	1245 kg	60 mm
VW	Golf GTI TCR DSG	R6	<b>1240 kg</b>	+ 0kg	1240 kg	70 mm

<sup>1</sup>Endurance Target Racing Weight is car's generic dry weight without driver.

<sup>2</sup>Endurance Minimum Weight is car's imposed minimum dry weight without driver.

Agreed principles: Assigned Ballast for Endurance Races will be 50% of the Assigned Ballast for TCR Races.

For any TCR Series or class with a participation of DSG cars over the 40% of the total number of cars on grid, the Target Racing Weight of the SEQ cars may be increased by the Series Promoter from 10 to 40 kg maximum. Promoters are requested to inform WSC in written form.

## Imposed parameters for certified software

### Alfa Romeo

Alfa Romeo	Giulietta Veloce TCR		Limit Support Points		
			<i>fEngRpm</i>	<i>pManifold</i>	<i>rLambda</i>
Engine		FPT	4200	2460	0.84
ECU Make (Type)		Life Racing (Motorsport)	4450	2485	0.83
Gearbox		any	4700	2630	0.83
ECU Type & Power Level		M5	4950	2715	0.84
Calibration File		20_AL-all-M5_1_0.lrc	5200	2715	0.83
<b>Calibration File (with ABS)</b>		<b>AL-FPT-M5-S-E_1-0-0.lrc</b>	5450	2720	0.82
Correction [mbar/°C]		1	5700	2725	0.81
Checksum	crcHigh	51828	5950	2720	0.80
	crcLow	62313	6200	2720	0.81
			6450	2705	0.81
<i>units: [1/min] for fEngRpm, [mbar] for pManifold</i>			6700	2680	0.82
			6950	2750	0.82
			7100	2750	0.82
			7200	2700	0.80

Alfa Romeo	Giulietta RF TCR		Limit Support Points		
			<i>fEngRpm</i>	<i>pManifold</i>	<i>rLambda</i>
Engine		FPT	4200	2455	0.84
ECU Make (Type)		Life Racing (Motorsport)	4450	2495	0.84
Gearbox		any	4700	2645	0.84
ECU Type & Power Level		M6	4950	2715	0.84
Calibration File		20_AL-all-M6_1_0.lrc	5200	2720	0.84
Correction [mbar/°C]		1	5450	2720	0.84
Checksum	crcHigh	62165	5700	2720	0.82
	crcLow	2058	5950	2725	0.82
			6200	2725	0.82
<i>units: [1/min] for fEngRpm, [mbar] for pManifold</i>			6450	2725	0.82
			6700	2720	0.81
			6950	2725	0.80
			7100	2725	0.80
			7200	2660	0.80

## Audi, Cupra, VW

Audi	RS3 LMS SEQ	Limit Support Points		
Cupra	Cupra TCR SEQ	<i>fEngRpm</i>	<i>pManifold</i>	<i>rLambda</i>
VW	Golf GTI TCR SEQ	4000	2380	1.00
		4250	2380	1.00
Engine	EA888Evo3	4500	2380	0.98
ECU Make (Type)	Continental (Roadcar)	4750	2445	0.97
Gearbox	Sadev	5000	2510	0.96
ECU Type & Power Level	R5	5250	2565	0.95
Calibration File	-	5500	2620	0.92
Correction [mbar/°C]	9	5750	2625	0.88
Checksum	5F6906259AB	6000	2630	0.87
		6250	2515	0.86
<i>units: [1/min] for fEngRpm, [mbar] for pManifold</i>		6500	2400	0.88
		6750	2325	0.88
		6900	2310	0.88
		7000	2250	0.94

Audi	RS3 LMS DSG	Limit Support Points		
Cupra	Cupra TCR DSG	<i>fEngRpm</i>	<i>pManifold</i>	<i>rLambda</i>
VW	Golf GTI TCR DSG	4000	2450	-
		4250	2450	-
Engine	EA888Evo3	4500	2450	-
ECU Make (Type)	Continental (Roadcar)	4750	2450	-
Gearbox	DSG	5000	2450	-
ECU Type & Power Level	R6	5250	2540	-
Calibration File	-	5500	2630	-
Correction [mbar/°C]	5	5750	2640	-
Checksum	5F6906259L	6000	2650	-
		6250	2615	-
<i>units: [1/min] for fEngRpm, [mbar] for pManifold</i>		6500	2580	-
		6750	2550	-
		6900	2540	-
		7000	2520	-

## Cupra

Cupra	Leon Competición TCR		Limit Support Points		
			<i>fEngRpm</i>	<i>pManifold</i>	<i>rLambda</i>
Engine		EA888Evo4	4100	2015	0.87
ECU Make (Type)		TCR ECU (Common)	4350	2015	0.87
Gearbox		any	4600	1990	0.87
ECU Type & Power Level		C5	4850	1910	0.87
Calibration File		CU-EA888Evo4-C_1-1-0.clx	5100	1895	0.87
Correction [mbar/°C]		13	5350	2155	0.87
Checksum	crcEEP	3427E8B1	5600	2380	0.87
	crcAPP	30AEDD2C	5850	2440	0.87
	crcPartSign	4C876BE1	6100	2375	0.87
	crcPartZero	A7AD92AA	6350	2355	0.87
	crcPartOne	31ABE816	6600	2305	0.87
			6850	2275	0.87
<i>units: [1/min] for fEngRpm, [mbar] for pManifold</i>			7000	2275	0.87
			7100	1240	0.86

**KIA**

KIA	Cee'd TCR		Limit Support Points		
			<i>fEngRpm</i>	<i>pManifold</i>	<i>rLambda</i>
Engine		G4KH	3900	2430	-
ECU Make (Type)		MoTeC (Motorsport)	4150	2430	-
Gearbox		any	4400	2430	-
ECU Type & Power Level		M5	4650	2490	-
Calibration File		1502_KIA_TCR_100%_WSC_BoP_19_final	4900	2545	-
Correction [mbar/°C]		1	5150	2560	-
			5400	2570	-
<i>units: [1/min] for fEngRpm, [mbar] for pManifold</i>			5650	2665	-
			5900	2560	-
			6150	2555	-
			6400	2550	-
			6650	2540	-
			6800	2535	-
			6900	2530	-

## Honda

Honda	Civic FK2 TCR	Limit Support Points		
		fEngRpm	pManifold	rLambda
Engine	K20CR	4100	2130	-
ECU Make (Type)	EFI (Motorsport)	4350	2130	-
Gearbox	any	4600	2130	-
ECU Type & Power Level	M5	4850	2200	-
Calibration File	TCR-C2.7.98+7.5	5100	2275	-
Correction [mbar/°C]	2	5350	2345	-
		5600	2415	-
<i>units: [1/min] for fEngRpm, [mbar] for pManifold</i>		5850	2480	-
		6100	2550	-
		6350	2545	-
		6600	2540	-
		6850	2455	-
		7000	2430	-
		7100	2370	-

Honda	Civic FK7 TCR	Limit Support Points		
		fEngRpm	pManifold	rLambda
Engine	K20CRE	4000	<b>2170</b>	0.87
ECU Make (Type)	MoTeC (Motorsport)	4250	<b>2170</b>	0.87
Gearbox	XTRAC	4500	<b>2155</b>	0.87
ECU Type & Power Level	M5	4750	<b>2115</b>	0.87
Calibration File	HO-K20CRE-M5-X-S_1-1-0.m1pkg	5000	<b>2195</b>	0.87
<b>Calibration File (with ABS)</b>	<b>HO-K20CRE-M5-X-E_1-1-0.m1pkg</b>	5250	<b>2340</b>	0.87
Correction [mbar/°C]	<b>10</b>	5500	<b>2475</b>	0.87
		5750	<b>2500</b>	0.87
Engine	K20CRE	6000	<b>2505</b>	0.87
ECU Make (Type)	MoTeC (Motorsport)	6250	<b>2465</b>	0.87
Gearbox	Sadev	6500	<b>2375</b>	0.87
ECU Type & Power Level	M5	6750	<b>2365</b>	0.87
Calibration File	HO-K20CRE-M5-S-S_1-1-0.m1pkg	6900	<b>2365</b>	0.86
<b>Calibration File (with ABS)</b>	<b>HO-K20CRE-M5-S-E_1-1-0.m1pkg</b>	7000	<b>1910</b>	0.85
Correction [mbar/°C]	<b>10</b>			

## Hyundai

Hyundai	i30 N TCR		Limit Support Points		
Hyundai	Veloster N TCR		<i>fEngRpm</i>	<i>pManifold</i>	<i>rLambda</i>
			4000	1990	0.90
Engine		Theta2G4KHA	4250	2000	0.88
ECU Make (Type)		Life Racing (Motorsport)	4500	2015	0.86
Gearbox		any	4750	2035	0.86
ECU Type & Power Level		M3	5000	2065	0.85
Calibration File		HY-Theta2G4KHA-M3_1-1-0.lrc	5250	2210	0.84
<b>Calibration File (with ABS)</b>		<b>HY-Theta2G4KHA-M3-X-E_1-1-0.lrc</b>	5500	2440	0.82
Correction [mbar/°C]		<b>10</b>	5750	2255	0.82
Checksum	crcHigh	29316	6000	<b>2245</b>	0.83
	crcLow	34932	6250	2235	0.82
			6500	2215	0.82
<i>units: [1/min] for fEngRpm, [mbar] for pManifold</i>			6750	2210	0.82
			6900	2210	0.85
			7000	1695	0.83



## Lada

Lada	Vesta Sport TCR		Limit Support Points		
			fEngRpm	pManifold	rLambda
Engine		M5P404	3900	2130	0.80
ECU Make (Type)		Marelli (Motorsport)	4150	2125	0.80
Gearbox		any	4400	2130	0.80
ECU Type & Power Level		M5	4650	2145	0.79
Calibration File		LA-VestaSport-M_2020-1-0.clx	4900	2220	0.79
Correction [mbar/°C]		2	5150	2385	0.78
Checksum	crcEEP1	52803	5400	2515	0.78
	crcEEP2	26594	5650	2670	0.78
	crcAPP1	36452	5900	2685	0.78
	crcAPP2	372	6150	2605	0.78
			6400	2510	0.78
<i>units: [1/min] for fEngRpm, [mbar] for pManifold</i>			6650	2430	0.78
			6800	2430	0.78
			6900	2360	0.78

Lada	Vesta TCR		Limit Support Points		
			fEngRpm	pManifold	rLambda
Engine		M5P404	3750	2230	-
ECU Make (Type)		Marelli (Motorsport)	4000	2230	-
Gearbox		any	4250	2230	-
ECU Type & Power Level		M5	4500	2250	-
Calibration File		SRG_MMGEN_14X_12.10.1.3	4750	2270	-
Correction [mbar/°C]		2	5000	2320	-
Checksum	crcEEP	0xfc35a13a	5250	2370	-
	crcAPP	0x2bec88a	5500	2435	-
			5750	2500	-
<i>units: [1/min] for fEngRpm, [mbar] for pManifold</i>			6000	2460	-
			6250	2420	-
			6500	2260	-
			6650	2230	-
			6750	2360	-

## Lynk&Co

Lynk&Co	03 TCR		Limit Support Points		
			fEngRpm	pManifold	rLambda
Engine		B4204T27	4200	2420	-
ECU Make (Type)		MoTeC (Motorsport)	4450	2420	-
Gearbox		any	4700	2420	-
ECU Type & Power Level		M4	4950	2435	-
Calibration File		LynkCo 03 TCR Engine Custom ECU 97% v2.02	5200	2450	-
Correction [mbar/°C]		4	5450	2460	-
			5700	2470	-
<i>units: [1/min] for fEngRpm, [mbar] for pManifold</i>			5950	2470	-
			6200	2470	-
			6450	2480	-
			6700	2490	-
			6950	2470	-
			7100	2460	-
			7200	2440	-

## MG

MG	6 XPOWER TCR		Limit Support Points		
			<i>fEngRpm</i>	<i>pManifold</i>	<i>rLambda</i>
Engine		SAICNLE	4400	2130	-
ECU Make (Type)		Marelli (Motorsport)	4650	2130	-
Gearbox		any	4900	2130	-
ECU Type & Power Level		M5	5150	2130	-
Calibration File		MG6_SRG_MAP_Dyno231019_BoP_101	5400	2130	-
Correction [mbar/°C]		0	5650	2135	-
Checksum		0x3fe3a46e	5900	2140	-
			6150	2165	-
<i>units: [1/min] for fEngRpm, [mbar] for pManifold</i>			6400	2190	-
			6650	2190	-
			6900	2190	-
			7150	2190	-
			7300	2190	-
			7400	2190	-

## Opel

Opel	Astra TCR		Limit Support Points		
			<i>fEngRpm</i>	<i>pManifold</i>	<i>rLambda</i>
Engine		B20NFT LHU	3900	2300	-
ECU Make (Type)		Marelli (Motorsport)	4150	2300	-
Gearbox		Sadev	4400	2300	-
ECU Type & Power Level		M6	4650	2370	-
Calibration File		12.7.3.32_BOP_2019_201prozent_final	4900	2465	-
Correction [mbar/°C]		2	5150	2565	-
Checksum		0x08afd417	5400	2620	-
			5650	2615	-
			5900	2610	-
			6150	2565	-
			6400	2520	-
			6650	2390	-
			6800	2370	-
			6900	2260	-

units: [1/min] for *fEngRpm*, [mbar] for *pManifold*

## Peugeot

Peugeot	308 TCR		Limit Support Points		
			fEngRpm	pManifold	rLambda
Engine		EP6FDTR	4250	<b>2495</b>	0.78
ECU Make (Type)		Marelli (Motorsport)	4500	<b>2495</b>	0.77
Gearbox		any	4750	<b>2560</b>	0.75
ECU Type & Power Level		M6	5000	<b>2480</b>	0.82
Calibration File		PE-308-M6_2020-1-0.clx	5250	<b>2385</b>	0.87
Correction [mbar/°C]		8	5500	<b>2450</b>	0.82
Checksum	<b>crcFirm1</b>	<b>38630</b>	5750	<b>2670</b>	0.79
	<b>crcFirm2</b>	<b>3096</b>	6000	<b>2890</b>	0.75
	<b>crcCalib1</b>	<b>42534</b>	6250	<b>2910</b>	0.76
	<b>crcCalib2</b>	<b>34464</b>	6500	<b>2855</b>	0.77
			6750	<b>2840</b>	0.77
<i>units: [1/min] for fEngRpm, [mbar] for pManifold</i>			7000	<b>2795</b>	0.78
			7150	<b>2795</b>	0.84
			7250	<b>2060</b>	0.87

Peugeot	308 Racing Cup		Limit Support Points		
			fEngRpm	pManifold	rLambda
Engine		EP6FDTR	4100	2630	-
ECU Make (Type)		Marelli (Motorsport)	4350	2630	-
Gearbox		any	4600	2630	-
ECU Type & Power Level		M6	4850	2640	-
Calibration File		TCR_121030_VSCC_1025_BOP_2019	5100	2650	-
Correction [mbar/°C]		1	5350	2660	-
Checksum		0x2d56713d	5600	2670	-
			5850	2715	-
<i>units: [1/min] for fEngRpm, [mbar] for pManifold</i>			6100	2760	-
			6350	2770	-
			6600	2780	-
			6850	2725	-
			7000	2710	-
			7100	2670	-

## Renault

Renault	Mégane RS TCR	Limit Support Points		
		<i>fEngRpm</i>	<i>pManifold</i>	<i>rLambda</i>
Engine	M5PTCE	4350	2675	0.87
ECU Make (Type)	Bosch (Motorsport)	4600	2655	0.86
Gearbox	any	4850	2660	0.85
ECU Type & Power Level	M5	5100	2710	0.84
Calibration File	RE-Megane-M5_2020-1-0.s19	5350	2680	0.83
Correction [mbar/°C]	4	5600	2755	0.81
		5850	2780	0.79
<i>units: [1/min] for fEngRpm, [mbar] for pManifold</i>		6100	2820	0.78
		6350	2890	0.77
		6600	2860	0.77
		6850	2890	0.77
		7100	2845	0.77
		7250	2845	0.77
		7350	2420	0.77

## Subaru

Subaru	STI TCR		Limit Support Points		
			fEngRpm	pManifold	rLambda
Engine		EJ20	4200	2345	-
ECU Make (Type)		MoTeC (Motorsport)	4450	2345	-
Gearbox		any	4700	2345	-
ECU Type & Power Level		M6	4950	2400	-
Calibration File		Subaru_STI_TCR_2019_BoP_102	5200	2450	-
Correction [mbar/°C]		2	5450	2600	-
			5700	2750	-
<i>units: [1/min] for fEngRpm, [mbar] for pManifold</i>			5950	2725	-
			6200	2700	-
			6450	2600	-
			6700	2500	-
			6950	2450	-
			7100	2440	-
			7200	2400	-



Andreas Bellu / WSC Technical Director