

## 2020 TCR TECHNICAL BULLETIN no. 8 / 2020-08-11

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

TCR BoP & Certified Cars (Modifications in bold):

Brand	Model	Engine Calibration	Base 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	<b>M6</b>	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	Cupra TCR SEQ	R5	1265 kg	- 10kg	1255 kg	60 mm
Cupra	Cupra TCR DSG	R6	1230 kg	+ 0kg	1230 kg	70 mm
Cupra	Leon Competición TCR	C5	1265 kg	+ 40kg	1305 kg	80 mm
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	<b>M3</b>	1265 kg	+ 40kg	1305 kg	90 mm
Hyundai	Veloster TCR N	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	+ 20kg	1285 kg	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

## Imposed parameters for certified software

### Alfa Romeo (Giulietta Veloce TCR, Giulietta RF TCR)

Alfa Romeo	Giulietta Veloce TCR		Limit Support Points		
			<i>fEngRpm</i>	<i>pManifold</i>	<i>rLambda</i>
Engine		FPT	4200	2460	0.84
ECU		Life Racing (Motorsport)	4450	2485	0.83
Gearbox		any	4700	2630	0.83
Calibration Code		M5	4950	2715	0.84
Calibration File		20_AL-all-M5_1_0.lrc	5200	2715	0.83
Correction [mbar/°C]		1	5450	2720	0.82
Checksum	crcHigh	51828	5700	2725	0.81
	crcLow	62313	5950	2720	0.80
			6200	2720	0.81
<i>units: [1/min] for fEngRpm, [mbar] for pManifold</i>			6450	2705	0.81
			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		Life Racing (Motorsport)	4450	2495	0.84
Gearbox		any	4700	2645	0.84
Calibration Code		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 (RS3 LMS SEQ, RS2 LMS DSG), Cupra (Cupra TCR SEQ & Cupra TCR DSG), VW (Golf GTI TCR SEQ & Golf GTI TCR DSG)**

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		Continental (Road car)	4750	2445	0.97
Gearbox		Sadev	5000	2510	0.96
Calibration Code		R5	5250	2565	0.95
Calibration File		-	5500	2620	0.92
Correction [mbar/°C]		9	5750	2625	0.88
Checksum	Partnumber	5F6906259AB	6000	2630	0.87
	Coding	-	6250	2515	0.86
			6500	2400	0.88
<i>units: [1/min] for fEngRpm, [mbar] for pManifold</i>			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	1.00
			4250	2450	1.00
Engine		EA888Evo3	4500	2450	0.98
ECU		Continental (Road car)	4750	2450	0.97
Gearbox		DSG	5000	2450	0.96
Calibration Code		R6	5250	2540	0.95
Calibration File		-	5500	2630	0.92
Correction [mbar/°C]		5	5750	2640	0.87
Checksum	Partnumber	5F6906259L	6000	2650	0.86
	Coding	-	6250	2615	0.86



			6500	2580	0.86
<i>units: [1/min] for fEngRpm, [mbar] for pManifold</i>			6750	2550	0.88
			6900	2540	0.88
			7000	2520	0.94

## Cupra (Leon Competición TCR)

Cupra	Leon Competición TCR		Limit Support Points		
			fEngRpm	pManifold	rLambda
Engine		EA888Evo4	4100	2015	0.87
ECU		TCR ECU (Common)	4350	2015	0.87
Gearbox		any	4600	1990	0.87
Calibration Code		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 (Cee'd TCR)

KIA	Cee'd TCR		Limit Support Points		
			fEngRpm	pManifold	rLambda
Engine		G4KH	3900	2430	-
ECU		MoTeC (Motorsport)	4150	2430	-
Gearbox		any	4400	2430	-
Calibration Code		M5	4650	2490	-
Calibration File		1502_KIA_TCR_100%_WSC_BoP_19_fi nal	4900	2545	-
Correction [mbar/°C]		1	5150	2560	-
			5400	2570	-
			5650	2665	-
			5900	2560	-
			6150	2555	-
			6400	2550	-
			6650	2540	-
			6800	2535	-
			6900	2530	-

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



## Honda (Civic FK2 TCR, Civic FK7 TCR)

Honda	Civic FK2 TCR		Limit Support Points		
			fEngRpm	pManifold	rLambda
Engine		K20CR	4100	2130	-
ECU		EFI (Motorsport)	4350	2130	-
Gearbox		any	4600	2130	-
Calibration Code		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	2160	0.87
ECU		MoTeC (Motorsport)	4250	2155	0.87
Gearbox		XTRAC	4500	2155	0.87
Calibration Code		M5	4750	2100	0.87
Calibration File		HO-K20CRE-M5-X-S_1-1-0.m1pkg	5000	2170	0.87
Correction [mbar/°C]		9	5250	2340	0.87
Checksum		(ECAL)	5500	2435	0.87
			5750	2495	0.87
Engine		K20CRE	6000	2490	0.87
ECU		MoTeC (Motorsport)	6250	2440	0.87
Gearbox		Sadev	6500	2375	0.87

Calibration Code		M5	6750	2320	0.87
Calibration File		HO-K20CRE-M5-S-S_1-1-0.m1pkg	6900	2320	0.86
Correction [mbar/°C]		9	7000	1915	0.85
Checksum		(ECAL)			
<i>units: [1/min] for fEngRpm, [mbar] for pManifold</i>					

## Hyundai (i30N TCR, Veloster N TCR)

Hyundai	i30 N TCR		Limit Support Points		
Hyundai	Veloster N TCR		fEngRpm	pManifold	rLambda
			4000	1810	0.90
Engine		Theta2G4KHA	4250	1810	0.88
ECU		Life Racing (Motorsport)	4500	1810	0.86
Gearbox		any	4750	1805	0.86
Calibration Code		M3	5000	1950	0.85
Calibration File		HY-Theta2G4KHA-M3_1-1-0.Irc	5250	2165	0.84
Correction [mbar/°C]		9	5500	2285	0.82
Checksum	crcHigh	26914	5750	2280	0.82
	crcLow	40543	6000	2225	0.83
<i>units: [1/min] for fEngRpm, [mbar] for pManifold</i>			6250	2180	0.82
			6500	2090	0.82
			6750	2045	0.82
			6900	2045	0.85
			7000	815	0.83



## Lada (Vesta Sport TCR, Vesta TCR)

Lada	Vesta Sport TCR		Limit Support Points		
			<i>fEngRpm</i>	<i>pManifold</i>	<i>rLambda</i>
Engine		M5P404	3900	2335	0.80
ECU		Marelli (Motorsport)	4150	2350	0.80
Gearbox		any	4400	2305	0.80
Calibration Code		M5	4650	2255	0.79
Calibration File		20_LY-03-19_1_1.clx	4900	2345	0.79
Correction [mbar/°C]		2	5150	2535	0.78
Checksum	crcEEP	52803-26594	5400	2615	0.78
	crcAPP	36452-372	5650	2665	0.78
			5900	2695	0.78
<i>units: [1/min] for fEngRpm, [mbar] for pManifold</i>			6150	2585	0.78
			6400	2525	0.78
			6650	2520	0.78
			6800	2520	0.78
			6900	2100	0.78

Lada	Vesta TCR		Limit Support Points		
			<i>fEngRpm</i>	<i>pManifold</i>	<i>rLambda</i>
Engine		M5P404	3750	2230	-
ECU		Marelli (Motorsport)	4000	2230	-
Gearbox		any	4250	2230	-
Calibration Code		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	0x2bebc88a	5500	2435	-
			5750	2500	-
<i>units: [1/min] for fEngRpm, [mbar] for pManifold</i>			6000	2460	-



			6250	2420	-
			6500	2260	-
			6650	2230	-
			6750	2100	-

## Lynk&Co (Cee'd TCR)

Lynk&Co	03 TCR		Limit Support Points		
			<i>fEngRpm</i>	<i>pManifold</i>	<i>rLambda</i>
Engine		B4204T27	4200	2420	-
ECU		MoTeC (Motorsport)	4450	2420	-
Gearbox		any	4700	2420	-
Calibration Code		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	-



## MG6 XPOWER TCR

MG6	XPOWER TCR		Limit Support Points		
			fEngRpm	pManifold	rLambda
Engine		SAICNLE	4400	2130	-
ECU		Marelli (Motorsport)	4650	2130	-
Gearbox		any	4900	2130	-
Calibration Code		M5	5150	2130	-
Calibration File		MG6_SRG_MAP_Dyno231019_BoP_10 1	5400	2130	-
Correction [mbar/°C]		0	5650	2135	-
Checksum	EEP	0x3fe3a46e	5900	2140	-
	APP		6150	2165	-
			6400	2190	-
<i>units: [1/min] for fEngRpm, [mbar] for pManifold</i>			6650	2190	-
			6900	2190	-
			7150	2190	-
			7300	2190	-
			7400	2190	-



## Opel Astra TCR

Opel	Astra TCR		Limit Support Points		
			fEngRpm	pManifold	rLambda
Engine		B20NFT LHU	3900	2300	-
ECU		Marelli (Motorsport)	4150	2300	-
Gearbox		any	4400	2300	-
Calibration Code		M6	4650	2370	-
Calibration File		12.7.3.32_BOP_2019_201prozent_final	4900	2465	-
Correction [mbar/°C]		2	5150	2565	-
Checksum	EEP	0x08afd417	5400	2620	-
	APP	-	5650	2615	-
			5900	2610	-
<i>units: [1/min] for fEngRpm, [mbar] for pManifold</i>			6150	2565	-
			6400	2520	-
			6650	2390	-
			6800	2370	-
			6900	2260	-



## Peugeot

Peugeot	308 TCR		Limit Support Points		
Peugeot	308 Racing Cup		<i>fEngRpm</i>	<i>pManifold</i>	<i>rLambda</i>
			4250	2465	0.78
Engine		EP6FDTR	4500	2462	0.77
ECU		Marelli (Motorsport)	4750	2465	0.75
Gearbox		any	5000	2528	0.82
Calibration Code		M6	5250	2450	0.87
Calibration File		PE-308-M6_2020-1-0.clx	5500	2355	0.82
Correction [mbar/°C]		8	5750	2417	0.79
Checksum	CRC1	38630	6000	2577	0.75
	CRC2	3096	6250	2736	0.76
	CRC3	31135	6500	2684	0.77
	CRC4	22499	6750	2701	0.77
			7000	2686	0.78
<i>units: [1/min] for fEngRpm, [mbar] for pManifold</i>			7150	2686	0.84
			7250	2673	0.87



## Renault

Renault	Mégane RS TCR		Limit Support Points		
			fEngRpm	pManifold	rLambda
Engine		M5PTCE	4350	2645	0.87
ECU		Bosch (Motorsport)	4600	2621	0.86
Gearbox		any	4850	2628	0.85
Calibration Code		M5	5100	2680	0.84
Calibration File		RE-Megane-M5_2020-1-0.s19	5350	2646	0.83
Correction [mbar/°C]		4	5600	2723	0.81
Checksum	Bosch	-	5850	2746	0.79
			6100	2787	0.78
<i>units: [1/min] for fEngRpm, [mbar] for pManifold</i>			6350	2858	0.77
			6600	2827	0.77
			6850	2860	0.77
			7100	2814	0.77
			7250	2814	0.77
			7350	2387	0.77

## Subaru

Subaru	STI TCR		Limit Support Points		
			fEngRpm	pManifold	rLambda
Engine		EJ20	4200	2345	-
ECU		MoTeC (Motorsport)	4450	2345	-
Gearbox		any	4700	2345	-
Calibration Code		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	-

### 2020 TCR Technical Regulation

#### Art. 3.6 Data Logging

The implementation of the 2nd Temperature-Sensor for the inlet air temperature in the manifold is postponed on 2021, January 1<sup>st</sup>.

#### Art. 14.12 Battery fuse

The implementation of the Battery Fuse is postponed on 2021, January 1<sup>st</sup>.

WSC will help manufacturers and promoters who decide to use these both items in their series with dedicated certifications.

### Certifications

Following cars will be exempted from the Addendum for Electric Components: Alfa Romeo Giulietta RF TCR, Cupra TCR SEQ, Cupra TCR DSG, Honda Civic FK2 TCR, KIA Cee'd TCR, Lada Vesta TCR, Opel Astra TCR, Peugeot 308 Racing Cup, Subaru STI TCR, VW Golf GTI TCR SEQ, VW Golf GTI TCR DSG



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