

## 2020 TCR TECHNICAL BULLETIN no. 9 / 2020-08-14

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	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	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	+ 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

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
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 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		
			<i>fEngRpm</i>	<i>pManifold</i>	<i>rLambda</i>
Cupra	Cupra TCR SEQ				
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	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		
			<i>fEngRpm</i>	<i>pManifold</i>	<i>rLambda</i>
Cupra	Cupra TCR DSG				
VW	Golf GTI TCR DSG		4000	2450	1.00
			4250	2450	1.00
Engine		EA888Evo3	4500	2450	0.98
ECU Make (Type)		Continental (Roadcar)	4750	2450	0.97
Gearbox		DSG	5000	2450	0.96
ECU Type & Power Level		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

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		
		<i>fEngRpm</i>	<i>pManifold</i>	<i>rLambda</i>
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		
		<i>fEngRpm</i>	<i>pManifold</i>	<i>rLambda</i>
Engine	K20CRE	4000	2160	0.87
ECU Make (Type)	MoTeC (Motorsport)	4250	2155	0.87
Gearbox	XTRAC	4500	2155	0.87
ECU Type & Power Level	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
		5500	2435	0.87
		5750	2495	0.87
Engine	K20CRE	6000	2490	0.87
ECU Make (Type)	MoTeC (Motorsport)	6250	2440	0.87
Gearbox	Sadev	6500	2375	0.87
ECU Type & Power Level	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

## Hyundai

Hyundai	i30 N TCR		Limit Support Points		
Hyundai	Veloster N TCR		<i>fEngRpm</i>	<i>pManifold</i>	<i>rLambda</i>
			4000	<b>1990</b>	0.90
Engine		Theta2G4KHA	4250	<b>2000</b>	0.88
ECU Make (Type)		Life Racing (Motorsport)	4500	<b>2015</b>	0.86
Gearbox		any	4750	<b>2035</b>	0.86
ECU Type & Power Level		M3	5000	<b>2065</b>	0.85
Calibration File		HY-Theta2G4KHA-M3_1-1-0.lrc	5250	<b>2210</b>	0.84
Correction [mbar/°C]		9	5500	<b>2440</b>	0.82
Checksum	crcHigh	<b>29316</b>	5750	<b>2255</b>	0.82
	crcLow	<b>34932</b>	6000	<b>2205</b>	0.83
			6250	<b>2235</b>	0.82
<i>units: [1/min] for fEngRpm, [mbar] for pManifold</i>			6500	<b>2215</b>	0.82
			6750	<b>2210</b>	0.82
			6900	<b>2210</b>	0.85
			7000	<b>1695</b>	0.83

## Lada

Lada	Vesta Sport TCR		Limit Support Points		
			<i>fEngRpm</i>	<i>pManifold</i>	<i>rLambda</i>
Engine		M5P404	3900	<b>2130</b>	0.80
ECU Make (Type)		Marelli (Motorsport)	4150	<b>2125</b>	0.80
Gearbox		any	4400	<b>2130</b>	0.80
ECU Type & Power Level		M5	4650	<b>2145</b>	0.79
Calibration File		20_LY-03-19_1_1.clx	4900	<b>2220</b>	0.79
Correction [mbar/°C]		2	5150	<b>2385</b>	0.78
Checksum	crcEEP	52803-26594	5400	<b>2515</b>	0.78
	crcAPP	36452-372	5650	<b>2670</b>	0.78
			5900	<b>2685</b>	0.78
<i>units: [1/min] for fEngRpm, [mbar] for pManifold</i>			6150	<b>2605</b>	0.78
			6400	<b>2510</b>	0.78
			6650	<b>2430</b>	0.78
			6800	<b>2430</b>	0.78
			6900	<b>2360</b>	0.78

Lada	Vesta TCR		Limit Support Points		
			<i>fEngRpm</i>	<i>pManifold</i>	<i>rLambda</i>
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	0x2bebc88a	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	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

Opel	Astra TCR		Limit Support Points		
			fEngRpm	pManifold	rLambda
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	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	2495	0.78
Engine		EP6FDTR	4500	2495	0.77
ECU Make (Type)		Marelli (Motorsport)	4750	2495	0.75
Gearbox		any	5000	2560	0.82
ECU Type & Power Level		M6	5250	2480	0.87
Calibration File		PE-308-M6_2020-1-0.clx	5500	2385	0.82
Correction [mbar/°C]		8	5750	2450	0.79
Checksum	CRC1	38630	6000	2610	0.75
	CRC2	3096	6250	2770	0.76
	CRC3	31135	6500	2715	0.77
	CRC4	22499	6750	2735	0.77
			7000	2720	0.78
<i>units: [1/min] for fEngRpm, [mbar] for pManifold</i>			7150	2720	0.84
			7250	2705	0.87

## Renault

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

## Subaru

Subaru	STI TCR		Limit Support Points		
			<i>fEngRpm</i>	<i>pManifold</i>	<i>rLambda</i>
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	-

## 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>.

**Due to the high number of TCR cars around the world, implementation of the sensor has been postponed to January 2021. However, should the promoter of a TCR series decide to implement immediately and the manufacturers represented in the series can deliver the sensor to their clients, the promoter can impose the sensor by Sporting Bulletin. In this case the promoter shall inform WSC on time. Errata docs will be available for all competitors applying for the sensor.**

### 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
- **Audi RS3 LMS SEQ**
- **Audi RS3 LMS DSG**
- 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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