

### GENERAL MOTORS LLC.

Executive Order: A-006-2132-1
New Passenger Cars, Light-Duty Trucks and
Medium-Duty Vehicles
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Pursuant to the authority vested in California Air Resources Board by Health and Safety Code (HSC), Division 26, Part 5, Chapter 2; and pursuant to the authority vested in the undersigned by HSC Sections 39515 and 39516 and Executive Order G-14-012;

IT IS ORDERED AND RESOLVED: That the following exhaust and evaporative emission control systems produced by the manufacturer are certified as described below. Production vehicles shall be in all material respects the same as those for which certification is granted.

					TEST GRO	UP IN	IFORI	MATION					
MODE	- 1 - 1 -	ST GROUP	GROUP VEHICLE CLASS(ES)				FUEL CATEGORY				FUEL TYPE		
2019	KG	MXV06.2090			PC		1		SINGLE FUEL HICLE		GASOLINE		
Ţ	JSEFUL	LIFE (miles)		VEH	ICLE EMISS	ION C	ATEC	ORY	INTERIM / IN	TEF	RMEDIATE IN-USE STD		
EXH	ORVR	EVAP			FTP		SF	ГР	FTP		SFTP		
15	0000	150000		LEV3	LEV160	LEV	3 CC	MPOSITE	*		*		
SPE	CIAL FE	ATURES & EXI	IAUS		ON CONTRO	L		OBD S	TATUS	ENGINE DISPLACEME			
1		DFI, 2TW	C(2)	, 2HO2S (	2)			FULL	*	11			
2	S	C, CAC, DFI,	217	VC(2), 2H	IO2S (2)		Р	ARTIAL	ALL MODELS	11	6.2		
*			*					TIAL WITH					
		EV	APO	RATIVE &	REFUELING	(EVA	P/OR	VR) FAMIL	INFORMATIO	V			
EVA	P / ORV	R FAMILY	EVA	PORATIVE	STD CATE	GORY	ORY EVAP EMISSION STD VEHICLE CLASS				SPECIAL FEATURES		
K	GMXR01	3030B		LEV 3	OPTION2 PC			PC		HCT			
K	GMXR01	33810		LEV 2 PC			PC			*			
				I	EMISSION C	REDIT	INFO	RMATION					
	EDIT FO	X FLEET AVE. OR EXTENDED RRANTY			REDIT FOR N ZERO-EVAP		ZEV	NMOG C	REDIT FOR DO	R	OPTIONAL EXH. STD FOR WORK TRUCKS		
		N			N				N		N		
				NMOG	AND FLEET	Γ AVE	RAGE	INFORMA	TION				
NMOG RAF	CH4 RAF	FTP NMOG/NMHC RATIO		HO/NMHC RATIO	NMOG+NO PC+LDT (		50 LVW) LD		NMOG+NOX FLEET STD LDT (3751 LVW-8500 GVWR) + MDPV (g/mi)				
*	*	1.10		*	o	.072			0.083		*		

See the Attachment for Vehicle Models, Evaporative Family, Engine Displacement, Emission Control Systems, Phase-In Standards, OBD Compliance, Emission Standards and Certification Levels, and Abbreviations.



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#### BE IT FURTHER RESOLVED:

The exhaust and evaporative emission standards and the certification emission levels for the listed vehicles are as listed on the Attachment. Compliance with the 50° Fahrenheit testing requirement may have been met based on the manufacturer's submitted compliance plan in lieu of testing. Any debit in the manufacturer's fleet average compliance requirement for NMOG+NOx or Vehicle Equivalent Credit (13 CCR Sections 1961.2(b)(1), 1961.2(b)(3), or 1961.2(c)(3), and the incorporated test procedures, as applicable), or Greenhouse Gas Emissions (13 CCR Section 1961.3, or 17 CCR Section 95663, and the incorporated test procedures, as applicable), for PC, LDT, MDPV or MDV shall be equalized as required.

### BE IT FURTHER RESOLVED:

For the listed vehicle models, the manufacturer has attested to compliance with Title 13, California Code of Regulations, (13 CCR) Sections 1965 [emission control labels], 1968.2 [on-board diagnostic, full or partial compliance], 2035 et seq. [emission control warranty], 2235 [fuel tank fill pipes and openings] (gasoline and alcohol fueled vehicles only), and "High-Altitude Requirements" and "Inspection and Maintenance Emission Standards" (California 2015 and Subsequent Model Criteria Pollutant Exhaust Emission Standards and Test Procedures and 2017 and Subsequent Model Greenhouse Gas Exhaust Emission Standards and Test Procedures for PC, LDT and MDV).

Vehicles certified under this Executive Order shall conform to all applicable California emission regulations.

This Executive Order hereby cancels and supersedes Executive Order A-006-2132 dated January 12, 2018.

The Bureau of Automotive Repair will be notified by copy of this Executive Order.

Executed at El Monte, California on this

\_\_day of February 2018.

Annette Hebert, Chief

Emissions Compliance, Automotive Regulations and Science Division



**FUEL TYPE** 

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# **ATTACHMENT**

# EXHAUST AND EVAPORATIVE EMISSION STANDARDS AND CERTIFICATION LEVELS

EXHAUST EMISSION STANDARDS AND CERTIFICATION LEVELS (FTP, HWFET, 50°F, 20°F)

CH4: methane; NMOG: non-CH4 organic gas; HC: hydrocarbon; NMHC: non-CH4 HC; CO: carbon monoxide; NOx: oxides of nitrogen; HCHO: formaldehyde; PM: particulate matter; RAF: reactivity adjustment factor; 2DHS/3DHS [g HC/test]: 2/3 days diurnal+hot-soak; RL [g HC/mi]: running loss; ORVR [g HC/gallon dispensed]: on-board refueling vapor recovery; g: gram; mg: milligram; mi: mile; K: 1000 miles; F: degrees Fahrenheit; FTP: federal test procedure; SFTP: supplemental FTP

		NMOG+NOx (g/mi)		CO (g/mi)		NOx (g/mi)		HCHO (mg/mi)		PM (g/mi)	
		CERT	STD	CERT	STD	CERT	STD	CERT	STD	CERT	STD
FTP@50K	*	*	*	*	*	*	*	*	*	*	*
FTP@UL	GASOLINE- TIER3 E10	0.054	0.160	0.6	4.2	*	*	*	4	*	0.01
50°F @4K	*	*	*	*	*	*	*	*	*		

	511EL 70/05	NMOG+N	Ox (g/mi)	CO (g/mi)		
	FUEL TYPE	CERT	STD ·	CERT	STD	
HWFET @ 50K	*	*	*			
HWFET @ UL	GASOLINE-TIER3 E10	0.009	0.160			
20°F @ 50K	COLD CO E10 REGULAR GASOLINE (TIER3)			2.2	10.0	

### SFTP EXHAUST EMISSION STANDARDS AND CERTIFICATION LEVELS

				US06		SC03		COMPOSITE		
	FUEL TYPE		NMOG+NOx (g/mi)	CO (g/mi)	PM (mg/mi)	NMOG+NOx (g/mi)	CO (g/mi)	NMOG+NOx (g/mi)	CO (g/mi)	PM (mg/mi)
@ 4K	*	CERT	*	*		*	*			
@ 41.		STD	*	*		*	*			
		CERT	*	*	*	*	*	0.071	0.7	*
@ UL	GASOLINE- TIER3 E10	STD	*	*	*	*	* .	0.090	4.2	*
		BIN						0.120		

### WHOLE VEHICLE EVAPORATIVE EMISSION STANDARDS AND CERTIFICATION LEVELS

			WHOLE						
EVAPORATIVE FAMILY	FUEL TYPE	3DH	S (g/test) (	D UL	2DI	HS (g/test) @	RL (g/mi) @ UL		
.,		CERT	STD	FEL	CERT	STD	FEL	CERT	STD
KGMXR013030B	GASOLINE- TIER3 E10	0.262	0.300	*	0.214	0.300	*	0.00	0.05
KGMKR0133810	GASOLINE - TIER 2 UNLEADED	0.20	0.50	*	0.29	0.65		0.02	0.05



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ORVR / FUEL ONLY / CANISTER BLEED EVAPORATIVE EMISSION STANDARDS AND CERTIFICATION LEVELS												
				FUEL ONLY EVAP & CANISTER BLEED								
EVAPORATIVE FAMILY	) UL	FUEL '	TYPE		IG TEST ) @ UL		IG TEST		ANISTER est) @ 4K			
	<b>FUEL TYP</b>	E CERT	STD			CERT	STD	CERT	STD	CERT	STD	
KGMXR013030B	GASOLINE TIER3 E	- 1001	0.20	GASOLINE- TIER3 E10		*	*	*	*	0.017	0.020	
KGMXR0133810	GASOLINE TIER 2 UNLEADE	0.01	0.20	*		*	*	*	*	*	*	
	EFFECTIV	E LEAK D	IAMETE	R STA	NDARI	D AND CE	RTIFICA	TION LEV	EL (INCH	IES)		
EVAPORATIVE	FAMILY	LEA	K FAMIL	Υ		CE	RT			STD		
KGMXR013030B KGMXR013030B-				·LK1		0.0	17			0.02		

: not applicable; #: pounds; UL; useful life; PC; passenger car; LDT; light-duty truck; LDT1; LDT<6000#GVWR,0-3750#LVW; LDT2; LDT<6000#GVWR,3751-5750#LVW; LDT3: LDT 6001-8500#GVWR,3751-5750#ALVW; LDT4: LDT 6001-8500#GVWR,5751-8500#ALVW; MDV: medium-duty vehicle; MDV4: MDV 8501-10000#GVWR; MDV5: MDV 10001-14000#GVWR; MDPV: mediumduty passenger vehicle; HDV: heavy-duty vehicle; ECS: emission control system, CERT: certification; STD: standard; FEL: family emission limit; GVWR: gross vehicle weight rating; LVW: loaded vehicle weight; ALVW: adjusted LVW; LEV: low emission vehicle; ULEV: ultra LEV; SULEV: super ULEV; ZEV: zero-emission vehicle; TZEV: transitional ZEV; TWC/OC: 3-way/oxidizing catalyst; ADSTWC: adsorbing TWC; HAC: HC adsorbing catalyst; WU: warm-up catalyst; NAC: NOx adsorption catalyst; SCR-U or SCRC/SCR-N or SCRC-NH3: selective catalytic reduction-urea/ammonia; NH3OC: ammonia oxidation catalyst; CTOX/PTOX: continuous/periodic trap oxidizer; DPF: diesel particulate filter (active); GPF: PM filter for spark-ignited engine; HO2S/O2S: heated/oxygen sensor; WR-HO2S or AFS: wide range/linear/heated air-fuel ratio sensor; NOXS: NOx sensor; PMS: PM sensor; RDQS: reductant quality sensor; NH3S: ammonia sensor; EGR: exhaust gas recirculation; EGRC: EGR cooler; AIR/AIRE: secondary air injection (belt driven)/(electric driven); PAIR: pulsed AIR; SFI/MFI: sequential/multiport fuel injection; DFI/IFI: direct/indirect fuel injection; TC/SC: turbo/super charger; CAC: charge air cooler; FFH: fuel fired heater; F/P/\$: full/partial/partial with fines on-board diagnostic; DOR: direct ozone reducing; HCT: hydrocarbon trap; BCAN: bleed carbon canister; prefix 2: parallel; (2) suffix: series; CNG/LNG: compressed/liquefied natural gas; LPG: liquefied petroleum gas; E85: "85%" ethanol ("15%"gasoline) fuel; E10: "10%" ethanol ("90%"gasoline) fuel; A: automatic (with lockup); M: manual transmission; SA: semi-automatic transmission; CV: continuously variable transmission; SCV: selectable continuously variable transmission; AM: automated manual transmission; AMS: automated manual-selectable transmission; OT; other transmission; AER; all-electric range; EAER; equivalent AER; PHEV; plug-in hybrid electric vehicle

# 2019 MODEL YEAR: VEHICLE MODELS INFORMATION

MAKE	MODEL	VEH CLASS	ENGINE (L)	TRANS TYPE	EVAPORATIVE FAMILY	EXH ECS	OBD
CHEVROLET	CAMARO	PC	6.2	M6,SA10	KGMXR013030B	1	P
CHEVROLET	CORVETTE	PC	6.2	M7,SA8	KGMXR0133810	2	P
CHEVROLET	CORVETTE	PC	6.2	M7, SA8	KGMXR0133810	1	P