California Environmental Protection Agency

OB Air Resources Board

GENERAL MOTORS LLC. Executive Order: A-006-2080

New Passenger Cars, Light-Duty Trucks and Medium-Duty Vehicles
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Pursuant to the authority vested in the 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: 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 GR	OUP INF	ORMAT	ION				
MODE	TEST GROUP VEHICLE CLASS				LE CLASS(ES)	FUEL CATEGORY		FUEL TYPE			
2018 JGMXV02.0031				PC DEDICATED VE			CATED SI		G/	GASOLINE		
ı	JSEFUL	LIFE	(miles)	VEH	ICLE EMIS	SION CA	TEGOR	Y	NTERIM / INTI	RMEDIA'	TE IN-USE STD	
EXH	ORVR		EVAP		FTP		SFTP		FTP		SFTP	
15	0000		150000	LEV3	ULEV70	LEV 3	COMPO	SITE	NMOG+NOX		*	
SPE	CIAL FE	ATUR	RES & EXH	AUST EMISSICEMS	ON CONTR	OL		OBD STA	rus	ENGINE	DISPLACEMENT (L)	
1		TWC	, DFI, H	02S(2), TC,	CAC		FUL	L	1			
*	*						PART	IAL A	LL MODELS	2.0		
*	*						PARTIAL WITH *					
	****		EV	APORATIVE &	REFUELIN	G (EVAP	(ORVR)	FAMILY IN	FORMATION			
EVA	P / ORV	R FAI	MILY	EVAPORATIVI	E STD CATI	EGORY		AP EMISS		SPECIA	L FEATURES	
J	GMXR01	1030	С	I	EV 2		PC				HCT	
J	GMXR01	1283	0	I	EV 2		PC ·				*	
J	GMXR01	3030	В	LEV 3	OPTION2		PC			HCT		
				AX	EMISSION	CREDIT	INFORM	ATION				
	A	LLOV	VANCE FO	R TEST GROU	IP			EDIT FOR			OPTIONAL EXH STD FOR WOR	
BASE	LINE P	ZEV	AT	PZEV	TZEV	NON	N-PZEV Z	ZERO-EVA	P DO	R	TRUCKS	
	*			+	*		l.	1	N		N	
				NMO	AND FLEI	ET AVER	AGE IN	ORMATIC	N			
NMOG RAF	G CH4 NMOG/NMHC HCHO/NMHC PC		PC+LDT		0-3750 LVW)		OX FLEET ST 51 LVW-8500 + MDPV (g/mi)	MDV (10001-14000				
*	*		1.10	*		0.079			0.092	*		

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 NMOG+NOx and greenhouse gas Fleet Average (PC or LDT or MDPV) or "Vehicle Equivalent Credit" (MDV) compliance plan 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).

BE IT FURTHER RESOLVED:

For evaporative family JGMXR013030B, the manufacturer has attested to compliance with the 0.02 inch effective leak diameter standard in 13 CCR Section 1976(b)(1)(G)6 ["Effective Leak Diameter Standard And Procedure"].

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

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

Executed at El Monte, California on this day of March 2017.

Annette Hebert, Chief

Emissions Compliance, Automotive Regulations and Science Division

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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

FUEL TYPE

		NMOG (g/	s+NOx mi)	CO (g/mi)		NOx (g/mi)			HO J/mi)	PM (g/mi)	
		CERT	STD	CERT	STD	CERT	STD	CERT	STD	CERT	STD
FTP@50K	*	*	*	*	*	*	*	*	+	*	*
FTP@UL	GASOLINE- TIER3 E10	0.032	0.070	0.6	1.7	. *	*	*	4	*	0.01
50°F @4K	*	*	*	*	*	*	*	*	*	TO THE STATE OF	· 在 · · · · · · · · · · · · · · · · · ·

	CELLET TABLE	NMOG+N	lOx (g/mi)	CO	g/mi)
W. L. Street, St. St.	FUEL TYPE	CERT	STD	CERT	STD
HWFET @ 50K	*	*	*	and their states	
HWFET @ UL	GASOLINE-TIER3 E10	0.013	0.070		A
20°F @ 50K	COLD CO E10 REGULAR GASOLINE (TIER3)			2.4	10.0

SFTP EXHAUST EMISSION STANDARDS AND CERTIFICATION LEVELS

		27 1222		US06	V	SC03	3	COMPOSITE			
2 / p. 12 V S	FUEL TYPE	and Street Control	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	*	*		*	*			144 - C	
		STD	*	*	Constitution of the consti	*	*				
		CERT	*	*	*	*	*	0.025	1.3	*	
@ UL	GASOLINE- TIER3 E10	STD	*	*	*	*	*	0.097	4.2	*	
		BIN		COMMENS.	ALTONIA.		DOWN TO	0.080			

WHOLE VEHICLE EVAPORATIVE EMISSION STANDARDS AND CERTIFICATION LEVELS

EVAPORATIVE FAMILY			WHOLE \						
	FUEL TYPE	3DHS (g/test) @ UL			2DI	HS (g/test) @	RL (g/mi) @ UL		
		CERT STD FEL CERT STD FEL	FEL	CERT	STD				
JGMXR011030C	GASOLINE - TIER 2 UNLEADED	0.364	0.50	*	0.189	0.65	*	0.00	0.05
JGMXR0112830	GASOLINE - TIER 2 UNLEADED	0.343	0.50	*	0.580	0.65	*	0.00	0.05
JGMXR013030B	GASOLINE- TIER3 E10	0.262	0.300	*	0.214	0.300	*	0.00	0.05

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	1000			FUEL ONLY EVAP & CANISTER BLEED								
EVAPORATIVE FAMILY	ORVR (g/gallon) @ UL			FUEL TYPE	3DHS RIG TEST (g/test) @ UL		2DHS RIG TEST (g/test) @ UL		BLEED CANISTER TEST (g/test) @ 4			
	FUEL TYPE	CERT	STD		CERT	STD	CERT	STD	CERT	STD		
JGMXR013030B	GASOLINE- TIER3 E10	0.01	0.20	GASOLINE- TIER3 E10	*	*	*	*	0.017	0.020		
JGMXR011030C	GASOLINE - TIER 2 UNLEADED	0.02	0.20	*	*	*	*	*	*	*		
JGMXR0112830	GASOLINE - TIER 2 UNLEADED	0.02	0.20	*	*	*	*	*	*	*		

: 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; PZEV: partial ZEV; AT PZEV: advanced technology PZEV; 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: semiautomatic transmission; CV: continuously variable transmission; SCV: selectable continuously variable transmission; AM: automated manual transmission; AMS: automated manual-selectable transmission; OT: other transmission

2018 MODEL YEAR: VEHICLE MODELS INFORMATION

MAKE	MODEL	VEH CLASS	ENGINE (L)	TRANS TYPE	EVAPORATIVE FAMILY	EXH ECS	OBD	PZEV TYPE
BUICK	REGAL	PC	2.0	SA9	JGMXR011030C	1	P	*
BUICK	REGAL AWD	PC	2.0	SA8,SA9	JGMXR011030C	1	P	*
BUICK	REGAL TOUR X	PC	2.0	SA8,SA9	JGMXR011030C	1	P	*
CADILLAC	ATS	PC	2.0	M6,SA8	JGMXR011030C	1	P	*
CADILLAC	ATS AWD	PC	2.0	SA8	JGMXR011030C	1	P	*
CADILLAC	CT6	PC	2.0	SA8	JGMXR0112830	1	P	*
CADILLAC	CTS	PC	2.0	SA8	JGMXR013030B	1	P	*
CADILLAC	CTS AWD	PC	2.0	SA8	JGMXR013030B	1	P	*
CHEVROLET	CAMARO	PC	2.0	M6,SA8	JGMXR013030B	.1	P	*
CHEVROLET	MALIBU	PC	2.0	A9	JGMXR011030C	1	P	*