California Environmental Protection Agency

⊘ Air Resources Board

GENERAL MOTORS LLC. Executive Order: A-006-2084

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	ORMATI	ON			
MODE	_	EST G	ROUP	VEHIC	LE CLASS(ES)	F	UEL CA	TEGORY	FL	JEL TYPE
2018	JG	MXT02	2.0100		LDT2		DEDI	CATED S VEHI	INGLE FUEL CLE	G	ASOLINE
	USEFUL	LIFE	(miles)	VEI	HICLE EMIS	SION CA	TEGORY		INTERIM / INT	ERMEDIA	TE IN-USE STD
EXH	/ORVR		EVAP		FTP		SFTP	70	FTP		SFTP
15	0000		150000	LEV3	ULEV70	LEV 3	COMPOS	SITE	NMOG+NOX		*
SPE	CIAL FE	ATUR		IAUST EMISSI TEMS	ON CONTR	OL		OBD STA	TUS	ENGINE	DISPLACEMENT (L)
1	* ****	TWO	, DFI, H	102S(2), TC,	CAC		FUL	L.	1		
*				*			PARTI	AL V	ALL MODELS	DELS 2.0	
*				*		F	PARTIAL		*		
			EV	APORATIVE &	REFUELIN	G (EVAP	ORVR)	AMILY II	NFORMATION		
EVA	P / ORV	RFA	MILY	EVAPORATIV	E STD CATE	EGORY		P EMISS	CLASS	SPECIA	L FEATURES
J	JGMXR01	2682	5	1	LEV 2			LDT	2		*
J	GMXR00	95371	В	1	LEV 2			LDT2	2		HCT
					EMISSION	CREDIT II	NFORMA	TION			
	A	LLOW	ANCE FO	R TEST GROU	JP ·			DIT FOR			OPTIONAL EXH
BASE	ELINE P	ZEV	AT	PZEV	TZEV	NON	-PZEV Z	ERO-EV	AP DO	R	TRUCKS
	*			*	*		N		N		N
				NMO	G AND FLEE	ET AVER	AGE INF	ORMATIC	ON		
NMOG RAF	CH4 RAF		FTP G/NMHC RATIO	HCHO/NMHC RATIO		OX FLEE (0-3750 l (g/mi)		LDT (37	IOX FLEET STI 751 LVW-8500 + MDPV (g/mi)	MDV	NOX FLEET STD ((10001-14000 VWR) (g/mi)
*	*		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).

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 April 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, I	HWFET,	50°F, 20°F)	
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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

- Alexandra Alfreda		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	0.036	0.070	0.6	1.7	*	*	*	4	*	0.01
50°F @4K	GASOLINE- TIER3 E10	0.058	0.140	1.2	1.7	*	*		16		

	FUEL TVDE	NMOG+N	Ox (g/mi)	CO (g/mi)		
	FUEL TYPE	CERT	STD	CERT	STD	
HWFET @ 50K	*	*	*	Service Services		
HWFET @ UL	GASOLINE-TIER3 E10	0.003	0.070	Contract to		
20°F @ 50K	COLD CO E10 REGULAR GASOLINE (TIER3)	and the same	the country of the first of	2.7	12.5	

SFTP EXHAUST EMISSION STANDARDS AND CERTIFICATION LEVELS

				US06	V	SC03	3	CON	POSITE	
	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	*	•		*	*		Total Services	
		STD	*	*		*	*	THE HOLLES	物质类	A STATE OF THE STA
		CERT	*	*	*	*	*	0.030	1.0	*
@ UL	GASOLINE- TIER3 E10	STD	*	*	*	*	*	0.097	4.2	*
		BIN						0.080		

WHOLE VEHICLE EVAPORATIVE EMISSION STANDARDS AND CERTIFICATION LEVELS

			WHOLE							
EVAPORATIVE FAMILY	FUEL TYPE	3DHS	S (g/test) (@ UL	2Di	HS (g/test) @	D UL	RL (g/m CERT 0.00 0.00	i) @ UL	
		CERT	STD	FEL	CERT	STD	FEL	CERT	STD	
JGMXR009537B	GASOLINE- TIER3 E10	0.201	0.65	*	0.444	0.85	*	0.00	0.05	
JGMXR0126825	GASOLINE- TIER3 E10	0.219	0.65	*	0.232	0.85	*	0.00	0.05	

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ORVR / FU	EL ONLY / CA	NISTER	BLEED	EVAPORATIVE	EMISSION	STANDA	RDS AND	CERTIFIC	ATION LEV	ELS			
				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 CANISTE TEST (g/test) @				
	FUEL TYPE	CERT	STD		CERT	STD	CERT	STD	CERT	STD			
JGMXR009537B	GASOLINE- TIER3 E10	0.02	0.20	*	*	*	*	*	*	*			
JGMXR0126825	GASOLINE- TIER3 E10	0.03	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	ENVISION AWD	LDT2	2,0	A9	JGMXR0126825	1	P	*
CHEVROLET	EQUINOX AWD	LDT2	2.0	A9	JGMXR009537B	1	P	*
CHEVROLET	EQUINOX FWD	LDT2	2.0	A9	JGMXR009537B	1	P	*
GMC	TERRAIN AWD	LDT2	2.0	A9	JGMXR009537B	1	P	*
GMC	TERRAIN FWD	LDT2	2.0	A9	JGMXR009537B	1	P	*