California Environmental Protection Agency

Om Air Resources Board

GENERAL MOTORS LLC. Executive Order: A-006-2093

New Passenger Cars, Light-Duty Trucks and Medium-Duty Vehicles

Page 1 of 4

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 IN	FORMAT	ION					
MODE		EST G	ROUP	VEH	CLE CLASS(I	ES)	FUEL CATEGORY				FUEL TYPE		
2018	2018 JGMXT06.2374 LDT4					DEDICATED SINGLE FUEL VEHICLE				GASOLINE			
l	JSEFUL	LIFE	(miles)	VI	EHICLE EMIS	SION C	ATEGOR	Y	IN	TERIM / INTI	ERMEDIA	TE IN-USE STD	
EXH/ORVR EVAP			FTP		SFTP			FTP	SFTP				
150000 150000 LEV3 ULEV125					3 ULEV125	LEV	3 СОМРО	SITE		*		NMOG+NOX	
SPE	CIAL FE	ATUR		AUST EMIS	SION CONTRO	DL		OBD ST	TATU	s	ENGINE	DISPLACEMENT (L)	
1		DF	I, 2TWC,	2HO2S(2)	, TWC		FUI	L	- American	*			
*				*			PART	TIAL	ALI	MODELS	6.2		
*	*						PARTIA			*			
			EV	APORATIVE	& REFUELING	G (EVA	P/ORVR)	FAMILY	INFO	ORMATION			
EVAP / ORVR FAMILY EVAPORATIVE STD CATEGO					GORY	Y EVAP EMISSION STD VEHICLE CLASS				SPECIA	L FEATURES		
J	GMXR02	1250E	3	LEV 3 OF	TION2 WITH	FEL	LDT4			HCT			
J	GMXR01	61502	A	LEV	3 OPTION2	OPTION2 LDT4						нст	
					EMISSION (REDIT	INFORM	IATION	******				
	Α	LLOW	ANCE FO	R TEST GRO	OUP		NMOG CR			NMOG CRE		OPTIONAL EXH.	
BASE	LINE P	ZEV	AT	PZEV	TZEV	NC	N-PZEV	ZERO-E	VAP	DO	R	TRUCKS	
* * *					*		1	N		N	N		
				NM	OG AND FLEE	TAVE	RAGE IN	FORMA	TION				
NMOG RAF	NM()(=/NMH(;)		PC+LDT	NMOG+NOX FLEE PC+LDT (0-3750 (g/mi)		0 LVW) LDT		(FLEET ST LVW-8500 MDPV (g/mi)	NMOG+NOX FLEET S MDV (10,001-14,000 GVWR) (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.

Executive Order: A-006-2093

New Passenger Cars, Light-Duty Trucks and

Medium-Duty Vehicles

Page 2 of 4

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 families JGMXR016150A and JGMXR021250B, 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 __

Annette Hebert, Chief

Emissions Compliance, Automotive Regulations and Science Division

GENERAL MOTORS LLC. Executive Order: A-006-2093

New Passenger Cars, Light-Duty Trucks and Medium-Duty Vehicles

Page 3 of 4

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

										.4.	
			S+NOx mi)	C - (g/i	O mi)	N((g/		HC (mg			M mi)
4-72-69		CERT	STD	CERT	STD	CERT	STD	CERT	STD	CERT	STD
FTP@50K	*	*	*	*	*	*	*	*	*	*	*
FTP@UL	GASOLINE- TIER3 E10	0.050	0.125	0.3	2.1	*	*	*	4	*	0.01
50°F @4K	*	. *	*	. *	*	*	*	*	*		NE E

	FUEL TYPE	NMOG+N	lOx (g/mi)	CO	(g/mi)
	FUEL TYPE	CERT	STD	CERT	STD
HWFET @ 50K	*	*	*		Esperative
HWFET @ UL	GASOLINE-TIER3 E10	0.008	0.125		
20°F @ 50K	COLD CO E10 REGULAR GASOLINE (TIER3)			1.5	12.5

SFTP EXHAUST EMISSION STANDARDS AND CERTIFICATION LEVELS

				US06		SC03	3	COMPOSITE			
# ³ 1	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	*	*		*	*		F.41.4.		
0		STD	*	*	FORTS 1	*	*				
		CERT	*	*	*	*	*	0.037	0.4	*	
@ UL	GASOLINE- TIER3 E10	STD	*	*	*	*	*	0.097	4.2	*	
		BIN					la di	0.120		the state of	

WHOLE VEHICLE EVAPORATIVE EMISSION STANDARDS AND CERTIFICATION LEVELS

			WHOLE						
EVAPORATIVE FAMILY	FUEL TYPE	3DHS (g/test) @ UL			2D	HS (g/test) (RL (g/mi) @ UL		
		CERT	STD	FEL	CERT	STD	FEL	CERT	STD
JGMXR016150A	GASOLINE- TIER3 E10	0.383	0.500	*	0.376	0.500	*	0.00	0.05
JGMXR021250B	GASOLINE- TIER3 E10	0.470	0.500	0.525	0.354	0.500	0.525	0.00	0.05

GENERAL MOTORS LLC. Executive Order: A-006-2093

New Passenger Cars, Light-Duty Trucks and Medium-Duty Vehicles

Page 4 of 4

OB Air Resources Board

				EVAPORATIVE EMISSION STANDARDS AND CERTIFICATION LEVELS 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			
JGMXR021250B	E10-EPA	0.03	0.20	GASOLINE- TIER3 E10	*	*	*	*	0.010	0.020			
JGMXR016150A	E10-EPA	0.01	0.20	GASOLINE- TIER3 E10	*	*	*	*	0.007	0.020			

: 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
CADILLAC	ESCALADE 2WD	LDT4	6.2	A10	JGMXR016150A	1	P	*
CADILLAC	ESCALADE 2WD	LDT4	6.2	A10	JGMXR021250B	1	P	*
CADILLAC	ESCALADE 4WD	LDT4	6.2	A10	JGMXR016150A	1	P	*
CADILLAC	ESCALADE 4WD	LDT4	6.2	A10	JGMXR021250B	1	P.	*
CHEVROLET	C15 SILVERADO 2WD	LDT4	6.2	A8	JGMXR016150A	1	P	*
CHEVROLET	C1500 TAHOE 2WD	LDT4	6.2	A10	JGMXR016150A	1	P	*
CHEVROLET	K15 SILVERADO 4WD	LDT4	6.2	A8	JGMXR016150A	1	P	* .
CHEVROLET	K1500 TAHOE 4WD	LDT4	6.2	A10	JGMXR016150A	1	P	*
GMC	C15 SIERRA 2WD	LDT4	6.2	A8	JGMXR016150A	1	P	*
GMC	C1500 YUKON 2WD	LDT4	6.2	A10	JGMXR016150A	1	P	*
GMC	C1500 YUKON XL 2WD	LDT4	6.2	A10	JGMXR021250B	1	P	*
GMC	K15 SIERRA 4WD	LDT4	6.2	A8	JGMXR016150A	1	P	*
GMC	K1500 YUKON 4WD	LDT4	6.2	A10	JGMXR016150A	1	P	*
GMC	K1500 YUKON XL 4WD	LDT4	6.2	A10	JGMXR021250B	1	P	*