California Environmental Protection Agency

⊘ Air Resources Board

GENERAL MOTORS

Executive Order: A-006-2040

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	TION							
MODE		EST G	ROUP	VEHICLE CLASS(ES)			FUEL CA		ATEG	ORY	FUEL TYPE				
2017	HG	MXV03	3.6048		PC		DEDICATED SINGLE FUEL VEHICLE			GASOLINE '					
1	USEFUL	LIFE	(miles)	II v	EHICLE EMIS	SION C	ATEGOR	RY	INT	FERIM / INTE	ERMEDIATE IN-USE STD				
EXH	/ORVR		EVAP FTP SFTP FTP					SFTP							
15	150000 150000			LEV	73 SULEV30	LEV	LEV 3 COMPOSITE		* .		*				
SPE	CIAL FE	ATUR		AUST EMIS	SION CONTRO	DL		OBD ST	ΓΑΤU	S	ENGINE	DISPLACEMENT (L)			
1	2TWC, TWC, 2HO2S(2), DFI						FULL		ALL MODELS						
*				*			PAR	RTIAL *			3.6				
*				*			AL WITH *								
			EV	APORATIVE	& REFUELING	G (EVA	P/ORVR)	FAMILY	INFO	ORMATION					
EVAP / ORVR FAMILY EVAPORATIVE STD CATEGO							Y EVAP EMISSION STD VEHICLE CLASS				SPECIAL FEATURES				
HGMXR0123702					LEV 2			PC			HCT				
					EMISSION C	REDIT	INFORM	IATION							
	A	LLOW	ANCE FO	R TEST GRO	DUP		NMOG CF			NMOG CRE		OPTIONAL EXH STD FOR WORK			
BASELINE PZEV AT PZEV					TZEV	NC	NON-PZEV ZERO-E\			DOF	TRUCKS				
ALL MODELS *					*		N			N	и . и				
				NM	OG AND FLEE	TAVE	RAGE IN	FORMAT	TION						
NMOG RAF	CH4 RAF NMOG/NMHC RATIO			HCHO/NMH RATIO	DCTI DT (D-7			NMOG+NOX FLEET ST LDT (3751 LVW-8500 GVWR) + MDPV (g/m		LVW-8500					
*	*	:	1.10	*		0.086			0.101		* .				

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.

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],

California Environmental Protection Agency

⊘ Air Resources Board

GENERAL MOTORS LLC. Executive Order: A-006-2040

New Passenger Cars, Light-Duty Trucks and

Medium-Duty Vehicles

Page 2 of 4

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:

Evaporative family HGMXR0123702 is certified pursuant to 13 CCR Section 1976(b)(1)(G)3 and deemed to comply with the requirements of 13 CCR Section 1976(b)(1)(G)1 ["LEV III evaporative requirements"].

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 25 day of May 2016.

Annette Hebert, Chief

Emissions Compliance, Automotive Regulations and Science Division

Ø Air Resources Board

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GENERAL MOTORS LLC.

Executive Order: A-006-2040 New Passenger Cars, Light-Duty Trucks and Medium-Duty Vehicles Page 3 of 4

ATTACHMENT

	EXHA						1000			-		FICATION		5	
		EXH										FET, 50°F, 2			
	FUE	FUEL TYPE		oxide; N stment f /R [g HC	Ox: oxid actor; 20 /gallon	es of nitro DHS/3DH dispensed	ogen; H0 S [g HC/ d]: on-bo	CHO: test]: 2 ard re	formalde 2/3 days fueling	ehyde; P s diurnal vapor re	M: particu +hot-soak covery; g:	IC: non-CH4 Ilate matter; I ; RL [g HC/m gram; mg: m broad: supplemen	RAF: reacti i]: running illigram; m	vity loss;	
				NMOG+NOx (g/mi)		CO (g/mi)			NOx (g/mi)		1	HCHO mg/mi)	1	PM (g/mi)	
EEA				RT	STD	CERT	STD		CERT	STD	CER	T STD	CERT	STD	
FTP@50	OK	K *		*	*	*	*	•	*	*	*	*	*	*	
FTP@U	TP@UL GASOLINE- LEV3 E10			011	0.030	0.1	1.0		*	*	*	4	*	0.01	
50°F @4	1K	*		*	*	*	*		*	*	*	*	The second second		
				FUEL TYPE					NMOG+NOx (g/mi)			CO (g/mi)			
					EL ITP	-			CE	RT	STD	CEF		STD	
HWFET @ 50K			*					*		*					
HWFET @ UL			GASOLINE-LEV3 E10					0.003		0.030					
20°F @ 50K				COLD CO E10 REGULAR						1.96		10.0			
			SFT	PEXHA	UST EM	ISSION	STANDA	RDS	AND C	ERTIFIC	ATION L				
					US06				SC03				OMPOSITE		
	FUEL TY			NMOG+NOx (g/mi)		CO PI				s+NOx mi)	CO (g/mi)	NMOG+NO (g/mi)	x CO (g/mi)	PM (mg/mi	
@ 4K	*	, CE		т *		•			*		*				
@ 41.				*		*			*		*			177	
		ASOLINE- LEV3 E10 ST		*		*	*		,	*	*	0.008	1.0	*	
@ UL				*		* *			*		*	0.103	4.2	*	
											0.050				
		WH	OLE VEH	ICLE E	APORA	TIVE EN	IISSION	STAN	IDARD	S AND C	ERTIFIC	ATION LEVE	LS		
					W	HOLE VE	HICLE	EVAP	ORATI	/E TEST	ING				
EVAPORATIVE FAMILY		F	UEL TYPE 3DHS (g			/test) @ UL			2DHS (g/test)		@ UL	RL (g/mi) @ UL		UL	
				CE	RT S	STD	FEL	CE	RT	STD	FEI	CE	RT	STD	
HGMXR0123702		2	ASOLINE TIER 2 JNLEADED	ER 2 0.257 0		.35 * 0		0.2	218 0.35		* 0		0.05		
C	RVR / F	UEL C	NLY / CA	NISTER	BLEED	EVAPO	RATIVE	EMIS	SION S	TANDA	RDS AND	CERTIFICA	TION LEV	ELS	
												STER BLEE	D		
EVAPORATIVE FAMILY			ORVR (g/ga		jallon) @ UL		FUEL TYPE		3DHS RIG TEST (g/test) @ UL			RIG TEST st) @ UL		LEED CANISTER ST (g/test) @ 4K	
		FU	FUEL TYPE		CERT STD				ERT STD		CERT	STD	CERT	STD	
HGMXR0123702			SOLINE -	0.01	0.20	1	GASOLINE - O		04	0.0	*	0.0	*	*	

CA PHASE 2

California Environmental Protection Agency

⊘ Air Resources Board

GENERAL MOTORS LLC. Executive Order: A-006-2040

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

Page 4 of 4

: not applicable; #: pounds; UL: useful life; PC: passenger car; LDT: light-duty truck; LDT1: LDT<6000#GVWR,0-3750#LVW; LDT2: .DT<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; 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

2017 MODEL YEAR: VEHICLE MODELS INFORMATION

MAKE	MODEL	VEH CLASS	ENGINE (L)	TRANS TYPE	EVAPORATIVE FAMILY	EXH ECS	OBD	PZEV TYPE
CADILLAC	XTS	PC	3.6	SA6	HGMXR0123702	1	F	PZEV
CHEVROLET	IMPALA	PC	3.6	SA6	HGMXR0123702	1	F	PZEV