California Environmental Protection Agency

⊘ Air Resources Board

GENERAL MOTORS LLC. Executive Order: A-006-1970

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 GROUP INFORMATION												
MODEL YEAR	1	rest gi	ROUP		VEHICLI	E CLASS(E	S)	FUEL CATEGORY			FL	FUEL TYPE	
2016	2016 GGMXV03.6042 PC						DEDICATED SINGLE FUEL VEHICLE			G	GASOLINE		
US	EFU	L LIFE	miles)		VEHIC	CLE EMISS	ION CAT	CATEGORY INTERIM / INTERMEDIATE II				TE IN-USE STD	
EXH/O	RVR		EVAP		F.	TP	S	FTP		FTP		SFTP	
1500	000		150000		LEV3 U	LEV125	LEV 3	COMPOSITE		*		NMOG+NOX	
SPECI	AL F	EATUR		HAUS TEMS		N CONTRO	L	OBD ST	TATUS		ENGINE	DISPLACEMENT (L)	
1		2TWC,	2H02S	(2),	DFI, 2TC,	CAC		FULL	*				
*				*				PARTIAL	ALL M	ODELS	11	3.6	
*				*			PA	PARTIAL WITH * FINES					
			E۱	/APOI	RATIVE & R	EFUELING	(EVAP/C	RVR) FA M ILY	INFORI	MATION	1		
EVAP	/ OR\	VR FAM	ILY	EVAI	PORATIVE	STD CATE	SORY	RY EVAP EMISSION STD VEHICLE CLASS SP			SPECIA	CIAL FEATURES	
GGN	MXR0	120818			LE	V 2		PC *			*		
					Ef	VISSION C	REDIT IN	ORMATION					
ALLOWANCE FOR TEST GROUP BASELINE PZEV AT PZEV TZEV							NMOG CREDIT FOR NON-PZEV ZERO- EVAP				ELD EUD MUDBKI		
* *						И		1	1	N			
	NMOG AND FLEET AVERAGE INFORMATION												
NMOG RAF CH4 RAF FTP NMOG/NMHC RATIO HCHO/N			HCHO/NM	HC RATI	PC+LDT	NMOG+NOX FLEET STD PC+LDT (0-3750 LVW) (g/mi)		NMOG+NOX FLEET STD LDT (3751 LVW-8500 GVWR) + MDPV (g/mi)					
*	* * 1.10 *			t .	0.093		0.110						

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.

⊘ Air Resources Board

GENERAL MOTORS LLC. Executive Order: A-006-1970

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, Californía 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 February 2015.

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Annette Hebert, Chief

Emissions Compliance, Automotive Regulations and Science Division

GENERAL MOTORS

Executive Order: A-006-1970

New Passenger Cars, Light-Duty Trucks and

Medium-Duty Vehicles

Page 3 of 4

ATTACHMENT

EXHAUST AND EVAPORATIVE EMISSION STANDARDS AND CERTIFICATION LEVELS

EVILATION ENGOLONI OTANDADDO AND OCCUPICATION I EVEL	O /FTD	1134/557	COOF COOF
EXHAUST EMISSION STANDARDS AND CERTIFICATION LEVEL	SIFIP	HVVFFI	200F 200F

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/i			O mi)		Ox mi)	HC (mg		P (g/	M mi)
		CERT	STD	CERT	STD	CERT	STD	CERT	STD	CERT	STD
FTP@50K	*	*	*	*	*	*	*	*	*	*	*
FTP@UL	GASOLINE- LEV3 E10	0.038	0.125	0.8	2.1	*	*	*	4	*	0.01
50°F @4K	*	*	*	*	*	*	* .	*	*		

THE REAL PROPERTY.	FUEL TYPE	NMOG+	NOx (g/mi)	CO (g/mi)		
	FUEL TYPE	CERT	STD	CERT	STD	
HWFET @ 50K	*	*	*			
HWFET @ UL	GASOLINE-LEV3 E10	0.013	0.125			
20°F @ 50K	GASOLINE-COLD CO HIGH OCTANE			2.0	10.0	

SFTP EXHAUST EMISSION STANDARDS AND CERTIFICATION LEVELS

1.12		V= =		US06		SC03	3	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)
0.414		CERT	*	*		*	*			
@ 4K	*	STD	*	*	. 1	*	*			7. 1
		CERT	*	*	*	*	*	0.024	0.6	*
@ UL	GASOLINE- LEV3 E10	STD	*	*	*	*	*	0.110	4.2	*
	TEA2 EIG	BIN		1	the first			0.120		

WHOLE VEHICLE EVAPORATIVE EMISSION STANDARDS AND CERTIFICATION LEVELS

EVA DODA TIVE			WHOLE	RL (g/mi) @ UL						
EVAPORATIVE FAMILY	FUEL TYPE	3DHS (g/test) @ UL			2DHS (g/test) @ UL			The (g/iiii) (g) OL		
TAINE!		CERT	STD	FEL	CERT	STD	FEL	CERT	STD	
GGMXR0120818	GASOLINE - TIER 2 UNLEADED	0.34	0.50	*	0.58	0.65	*	0.00	0.05	

ORVR / FUEL ONLY / CANISTER BLEED 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 CANISTER TEST (g/test) @ 4K				
	FUEL TYPE	CERT	STD		CERT	STD	CERT	STD	CERT	STD			
GGMXR0120818	GASOLINE - TIER 2 UNLEADED	0.02	0.20	*	*	*	*	*	*	*			

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GENERAL MOTORS LLC. Executive Order: A-006-1970

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: 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; 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 sparkignited 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

2016 MODEL YEAR: VEHICLE MODELS INFORMATION

MAKE	MODEL	VEH CLASS	ENGINE (L)	TRANS TYPE	EVAPORATIVE FAMILY	EXH ECS	OBD	PZEV TYPE
CADILLAC	ATS-V	PC	3.6	M6, SA8	GGMXR0120818	1	P	*

