California Environmental Protection Agency

⊘ Air Resources Board

GENERAL MOTORS LLC. Executive Order: A-006-1970-1

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 INFO	RMATION					
MODEL YEAR	TEST GROUP VEHICLE CLASS/E				ES)	S) FUEL CATEGORY			JEL TYPE		
2016	016 GGMXV03.6042 PC					DEDICATED SINGLE FUEL VEHICLE			GASOLINE		
US	EFUL LIFE	(miles)	VI	EHICLE EMIS	SION CATE	GORY	INTERIM / INT	ERMEDIA	TE IN-USE STD		
EXH/O	RVR	EVAP		FTP	S	FTP	FTP		SFTP		
1500	00	150000	LEV	3 ULEV125	LEV 3 C	COMPOSITE	*		NMOG+NOX		
SPECIA	AL FEATUR		CHAUST EMISS	SION CONTRO	DL	OBD ST	ATUS	ENGINE	DISPLACEMENT (L)		
1	2TWC,	2H02S	(2), DFI, 2	TC, CAC		FULL	*	4	7.00		
2	2TWC, T	WC, 2HC	D2S(2), DFI	2TC, CAC	2	PARTIAL	ALL MODELS	3.6			
*			PARTIAL WITH *								
		E	VAPORATIVE	& REFUELING	G (EVAPIO	RVR) FAMILY	INFORMATION				
EVAP / ORVR FAMILY EVAPORATIVE STD CATEGO						RY EVAP EMISSION STD VEHICLE CLASS			SPECIAL FEATURES		
GGM	XR0120818			LEV 2		PC			*		
GGM	XR0133880			LEV 2		PC			*		
				EMISSION C	REDIT INF	ORMATION					
	ALLOW	ANCE F	OR TEST GRO	OUP	- Contraction of the Contraction	G CREDIT FO			OPTIONAL EXH		
BASELI	BASELINE PZEV AT PZEV TZEV				NON-P	NON-PZEV ZERO-EVAP		OR TRUCKS			
	*		*	*		N	N		N		
			NMC	G AND FLEE	TAVERAG	E INFORMAT	ION				
NMOG RAF CH4 RAF FTP NMOG/NMHC RATIO HCHO/NMH				MHC RATIO	PC+LDT	X FLEET STD 0-3750 LVW) g/mi)	LDT (3	NMOG+NOX FLEET STD LDT (3751 LVW-8500 GVWR) + MDPV (g/mi)			
*	*		1.10		*	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.

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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 for PC, LDT and MDV).

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

This Executive Order hereby supersedes Executive Order A-006-1970 dated February 3, 2015.

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

Executed at El Monte, California on this 29 day of July 2015.

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

A STATE OF THE STA											
		NMOG+NOx (g/mi)		CO (g/mi)		NOx (g/mi)		HCHO (mg/mi)		PM (g/mi)	
a perme		CERT	STD	CERT	STD	CERT	STD	CERT	STD	CERT	STD
FTP@50K	*	*	*	*	*	*	*	*	*	*	*
FTP@UL	GASOLINE- LEV3 E10	0.0535	0.125	0.59	2.1	*	*	*	4	*	0.01
50°F @4K	GASOLINE- LEV3 E10	0.1019	0.250	0.57	2.1	*	*	*	16		

	FILE TYPE	NMOG+	NOx (g/mi)	CO (g/mi)		
	FUEL TYPE	CERT	STD	CERT	STD	
HWFET @ 50K	*	*	. *			
HWFET @ UL	GASOLINE-LEV3 E10	0.012	0.125		or services at provenience	
20°F @ 50K	GASOLINE-COLD CO HIGH OCTANE		Marie Commission	2.39	10.0	

SFTP EXHAUST EMISSION STANDARDS AND CERTIFICATION LEVELS

		Water !		US06		SC0	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)	
@ 4V	4	CERT	*	*		*	*	Toring the state of the same o		Marie Com	
@ 4K	•	STD	*	*		*	*	The second was a second	The state of		
		CERT	*	*	*	*	*	0.048	0.5	*	
@ UL GASOLINE- LEV3 E10	GASOLINE-	STD	*	*	*	*	*	0.110	4.2	*	
	DEVS HIGH	BIN	7 ASIA	14 36	400 400, 9		Light State / Section	0.120			

WHOLE VEHICLE EVAPORATIVE EMISSION STANDARDS AND CERTIFICATION LEVELS

			WHOLE							
EVAPORATIVE FAMILY	FUEL TYPE	3DH	S (g/test) (@ UL	2DHS (g/test) @ UL			RL (g/mi) @ UL		
		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	
GGMXR0133880	GASOLINE - TIER 2 UNLEADED	0.20	0.50	*	0.29	0.65	*	0.00	0.05	

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ORVR / FUI	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		
GGMXR0133880	GASOLINE - TIER 2 UNLEADED	0.01	0.20	*	*	*	*	*	*	*		
GGMXR0120818	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; 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	*
CADILLAC	CTS SEDAN	PC	3.6	SA8	GGMXR0133880	1	P	*
CADILLAC	XTS AWD	PC	3.6	SA6	GGMXR0133880	2	P	*