California Environmental Protection Agency

⊘ Air Resources Board

BAYERISCHE MOTOREN WERKE AG Executive Order: A-008-0412

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 GROU	JP II	NFOR	MATION					
MOD		TEST G	ROUP	ROUP VEHICLE CLASS(ES)					FUEL CATEGORY			FUEL TYPE		
201	2016 GBMXV00.613R					PC			PLUG-IN HYBRID ELECTRIC VEHICLE				GASOLINE	
USEFUL LIFE (miles)					VEHICLE EMISSION CATE				GORY	/ INTERIM / INT			DIAT	E IN-USE STD
EX	EXH/ORVR EVAP			•	F	TP		SFTP		-	FTP	SFTP		SFTP
1	.50000		15000	0 CE	OPT RTIF LEV3	SULEV CION YING TO SULEV SHOX	I		SFTP		*		. *	
SPECIAL FEATURES & EXHAUST EMISSION CONTROL OBD STATUS ENGINE DI SYSTEMS						DISPLACEMENT (L)								
1		T	WC, WR-	-HO2S, HO2	s, SF	'I			FULL		*			
*				*				PARTIAL AL		L MODELS	LS		0.6	
*				*				PAF	ARTIAL WITH * FINES *					
			Е	VAPORATIV	E&R	EFUELING (EVA	P/OR	RVR) FAMILY	/ INF	ORMATION	l		
EV	AP / OF	RVR FAI	MILY	EVAPORA	TIVE	STD CATEG	ORY	RY EVAP EMISSION STD VEHICLE CLASS			SPE	SPECIAL FEATURES		
	GBMXR	003513	R		LE	V 2			P	c	ĺ			*
					E	MISSION CR	EDI.	ΓINF	ORMATION					
		ALLOV	VANCE F	OR TEST GI	ROUP							OPTIONAL EXH. STD FOR WORK		
ВА	SELINE	PZEV	A	T PZEV		TZEV	NO	ON-PZ	ZEV ZERO-EVAP D		DO	OR ITTE		TRUCKS
A.	LL MOD	ELS	ALI	MODELS	AI	ALL MODELS			N N		. и		N	
				N	MOG /	AND FLEET	AVE	RAG	E INFORMA	TION	l			
NMO	G RAF	G RAF CH4 RAF FTP NMOG/NMHC HCHO/NMI		HCHO/NMF	ic R	CRATIO PC+LDT		NOX FLEET STD T (0-3750 LVW) (g/mi)		NMOG+NOX FLEET STD LDT (3751 LVW-8500 GVWR) + MDPV (g/mi)				
	*	*		1.04		*				0.0	93	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 and 2017 and Subsequent Model Greenhouse Gas Exhaust Emission Standards and Test Procedures for PC, LDT and MDV).

BE IT FURTHER RESOLVED: That the listed vehicle model is certified as a Type IIx Zero Emissions Vehicle (ZEV) and is granted ZEV multipliers and credits under 13 CCR Section 1962.1(d)

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 November 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 **FUEL TYPE** НСНО NMOG+NOx CO NOx PM (g/mi) (g/mi) (g/mi) (mg/mi) (g/mi) CERT CERT STD STD CERT STD CERT STD CERT STD FTP@50K GASOLINE -FTP@UL 0.015 0.030 0.2 1.0 4 0.01 CA PHASE 2 GASOLINE -50°F @4K 0.012 0.060 0.2 1.0 CA PHASE 2

	FUEL TYPE	NMOG+N	Ox (g/mi)	CO (g/mi)		
	FUEL TYPE	CERT	- STD	CERT	STD	
HWFET @ 50K	*	*	*			
HWFET @ UL	GASOLINE - CA PHASE 2	0.022	0.030			
20°F @ 50K	GASOLINE-COLD CO HIGH OCTANE			0.4	10.0	

SFTP EXHAUST EMISSION STANDARDS AND CERTIFICATION LEVELS

		1.1		US06		SC0	3	COMPOSITE			
	FUEL TYPE		NMHC+NOx (g/mi)	CO (g/mi)	PM (mg/mi)	NMHC+NOx (g/mi)	CO (g/mi)	NMHC+NOx (g/mi)	CO (g/mi)	PM (mg/mi)	
0.414	GASOLINE -	CERT	0.00	4.4		0.00	1.1			2	
@ 4K	CA PHASE 2	STD	0.14	8.0		0.20	2.7	191 11 1		A, 1.	
		CERT	*	*	*	*	*	*	*	*	
@ UL	*	STD	*	*	*	*	*	*	*	*	
		BIN				gerati, kriteri		*		. =====	

WHOLE VEHICLE EVAPORATIVE EMISSION STANDARDS AND CERTIFICATION LEVELS

			WHOLE						
EVAPORATIVE FAMILY	FUEL TYPE	3DH:	S (g/test) (@ UL	2D	HS (g/test) (RL (g/mi) @ UL		
		CERT	STD	FEL	CERT	STD	FEL	CERT	STD
GBMXR0035I3R	GASOLINE-CA PHASE 2	0.28	0.35	*	*	0.35	*	0.00	0.05

ORVR / FUEL ONLY / CANISTER BLEED EVAPORATIVE EMISSION STANDARDS AND CERTIFICATION LEVELS

				FUEL ONLY EVAP & CANISTER BLEED								
EVAPORATIVE FAMILY	ORVR (g/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		
GBMXR003513R	GASOLINE - TIER 2 UNLEADED	0.10	0.20	GASOLINE - CA PHASE 2	0.0	0.0	*	0.0	*	*		

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': 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; 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 **ENGINE** EVAPORATIVE EXH **VEH CLASS** TRANS TYPE MAKE MODEL OBD **PZEV TYPE** (L) **FAMILY ECS** BMW I3 REX PC 0.6 SA1 FBMXR0035I3R Ρ TZEV