California Environmental Protection Agency

⊘ Air Resources Board

BAYERISCHE MOTOREN WERKE AG

Executive Order: A-008-0415

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 GRO	UP I	NF	ORMATION	1						
MODE YEAR	- I T	EST G	ROUP		VEHICLE CLASS(ES)				FUE	EL C	ATE	GORY		FU	EL TYPE	
2016	GB	MXV02	2.0н48			PC			1	PLUG-IN HYBRID ELECTRIC VEHICLE				GASOLINE		
	USEFUL	LIFE	(miles)		\	/EHICLE EMISS	ION	CA.	TEGORY		IN	TERIM / IN	ŒΙ	ERMEDIATE IN-USE STD		
EXH	I/ORVR		EVAP			FTP			SFTP			FTP			SFTP	
15	0000		150000		LE	V3 ULEV125	LEV	7 3	COMPOSIT	re		PM		NMC	G+NOX AND PM	
SPE	CIAL FE	ATUR		HAUS'		SSION CONTRO	L		ОВ	BD ST	ΓΑΤΙ	JS		ENGINE	DISPLACEMENT (L)	
1	WU-TW	C, TW	C, WR-H	D2S,	HO2S,	DFI, TC, CA	c		FULL			*				
*				*					PARTIAL	-		* .		2.0		
*				*					PARTIAL W	ТH	ALL MODELS					
			EV	APOR	RATIVE	& REFUELING	(EV	AP/	ORVR) FAI	MILY	INF	ORMATION				
EVA	P / ORV	R FAN	MILY	EVAF	ORAT	TIVE STD CATE	3OR'	DRY EVAP EMISSION STD VEHICLE CLASS				SPECIA	L FEATURES			
	BMXR01	20F3I	ł			LEV 2				P	С		*			
						EMISSION C	REDI	T IN	NFORMATI	ON						
			ANCE FO						IOG CREDI -PZEV ZER			NMOG CR			OPTIONAL EXH. STD FOR WORK	
BASE	ELINE PZ	ZEV	AT	PZEV		TZEV									TRUCKS	
	*			*	* N							1	1		И	
					NM	IOG AND FLEET	AVE	ERA	AGE INFOR	RMAT	rion					
NMOG RAF	CH4 RAF	NMO	FTP G/NMHC ATIO	1	HCHO/NMHC RATIO NMOG+NOX F PC+LDT (0-3) (g/mi			750 LVW) LD		NMOG+NOX FLEET ST LDT (3751 LVW-8500 GVWR) + MDPV (g/mi			NMOG+NOX FLEET STD MDV (10001-14000 GVWR) (g/mi)			
*	*	:	1.10		*	0	.093	3			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.

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],

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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 vehicle models are conditionally certified in accordance with 13 CCR Section 1968.2(k) (deficiency and fines provisions for certification of malfunction and diagnostic system) because the on-board diagnostic II system of the listed vehicle models has been determined to have three deficiencies. The listed vehicle models are approved subject to the manufacturer paying a fine of twenty five dollars (\$25) per vehicle for the third deficiency in the listed test group that is produced and delivered for sale in California.

On a quarterly basis, the manufacturer shall submit to the Air Resources Board reports of the number of vehicles produced and delivered for sale in California and pay the full fine owed for that quarter pursuant to this conditional certification. Payment shall be made payable to the State Treasurer for deposit in the Air Pollution Control Fund no later than thirty (30) days after the end of each calendar quarter during the 2016 model-year production period. Failure to pay the quarterly fine, in full, in the time provided, may be cause for the Executive Officer to rescind this conditional certification, effective from the start of the quarter in question, in which case all vehicles covered under this conditional certification for that quarter and all future quarters would be deemed uncertified and subject to a civil penalty of up to \$5000 per vehicle pursuant to HSC Section 43154.

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 23 day of February 2016.

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

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

			3+NOx mi)	CO (g/mi)		NOx (g/mi)		HCHO (mg/mi)		PM (g/mi)	
14.5 = 54 - 34.6 = 7		CERT	STD	CERT	STD	CERT	STD	CERT	STD	CERT	STD
FTP@50K	*	*	*	*	*	*	*	*	*	*	*
FTP@UL	GASOLINE- LEV3 E10	0.081	0.125	0.8	2.1	*	*	*	4	0.001	0.003
50°F @4K	GASOLINE- LEV3 E10	0.038	0.250	0.3	2.1	*	*	*	16		

	FUEL TYPE	NMOG+N	Ox (g/mi)	CO (g/mi)		
	FUEL TYPE	CERT	STD	CERT	STD	
HWFET @ 50K	*	*	*			
HWFET @ UL	GASOLINE-LEV3 E10	0.004	0.125			
20°F @ 50K	COLD CO E10 REGULAR GASOLINE (TIER 3)		we think	0.5	10.0	

SFTP EXHAUST EMISSION STANDARDS AND CERTIFICATION LEVELS

4 1 1		1		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)	
@ 4K	*	CERT	*	*		*	*				
@ 41.		STD	*	*		*	*	= N	8 4		
		CERT	*	*	3	* .	*	0.041	0.6	*	
@ UL	GASOLINE- LEV3 E10	STD	*	*	10	*	*	0.110	4.2	*	
		BIN	1					0.120	. "	1	

WHOLE VEHICLE EVAPORATIVE EMISSION STANDARDS AND CERTIFICATION LEVELS

EVAPORATIVE FAMILY			WHOLE						
	FUEL TYPE	3DHS (g/test) @ UL			2DI	HS (g/test) @	RL (g/mi) @ UL		
		CERT	STD	FEL	CERT	STD	FEL	CERT	STD
GBMXR0120F3H	GASOLINE - TIER 2 UNLEADED	0.25	0.50	*	0.30	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		
GBMXR0120F3H	GASOLINE - TIER 2 UNLEADED	0.13	0.20	*	*	* .	*	*	*	*		

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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; ŽEV: 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											
MAKE	MODEL	VEH CLASS	ENGINE (L)	TRANS TYPE	EVAPORATIVE FAMILY	EXH ECS	OBD	PZEV TYPE				
BMW	330E	PC	2.0	SA8	GBMXR0120F3H	1	\$	*				