California Environmental Protection Agency

⊘ Air Resources Board

BAYERISCHE MOTOREN WERKE AG Executive Order: A-008-0391

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 GROUP INFORMATION											
MODE	- I TES	T GROUP		VEHICLE	CLASS(ES	5)	FUEL CA	TEGORY	FL	FUEL TYPE		
2016	2016 GBMXV04.4N63 PC						DEDICATED SINGLE FUEL VEHICLE			GASOLINE		
	USEFUL L	.IFE (miles)		VEHIC	CLE EMISSION	ON CATE	GORY	INTERIM / IN	TERMEDIA	ERMEDIATE IN-USE STD		
EXH	H/ORVR	EVAP		FI	ГР	SI	TP	FTP		SFTP		
12	20000	150000		LEV2	ULEV		2 SFTP VDARD	*		*		
SPECIAL FEATURES & EXHAUST EMISSION CONTROL SYSTEMS						OBD STA	TUS	ENGINE	DISPLACEMENT (L)			
1	2TWC,	2WR-HO2S,	2но2	5, DFI, 2	TC, 2CAC		FULL	*				
*			*				PARTIAL ALL MODELS 4.4			4.4		
*			*			PAI	PARTIAL WITH * FINES					
		EV	APOF	RATIVE & R	EFUELING	(EVAP/OI	RVR) FAMILY I	NFORMATION	1			
EVA	AP / ORVR	FAMILY	EVAF	ORATIVE	STD CATEG	ORY	DRY EVAP EMISSION STD VEHICLE CLASS			SPECIAL FEATURES		
	GBMXR013	0N54		LE	7 2		PC			HCT		
				ĖN	MISSION CR	EDIT INF	ORMATION					
	ALI	LOWANCE FO				1	G CREDIT FOR I-PZEV ZERO-	NMOG CR	EDIT FOR	STD FOR WORK		
BAS	ELINE PZE	V AT	PZEV		TZEV		EVAP			TRUCKS		
* * *							N	1	4	N		
	NMOG AND FLEET AVERAGE INFORMATION											
NMOG RAF CH4 RAF FTP NMOG/NMHC RATIO HCHO/NMHC				HC RATIO	NMOG+NOX FLEET PC+LDT (0-3750 LV (g/mi)		NMOG+NOX FLEET STD LDT (3751 LVW-8500 GVWR) + MDPV (g/mi)					
* * 1.04 *					0.093 0.110			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).

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 March 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
D/DE	1000 miles; F: degrees Fahrenheit; FTP: federal test procedure; SFTP: supplemental FTP

F	П	F	ì	T	V	P	F

10 mag 10 mg											
			IOG mi)	1	o mi)		Ox mi)		HO /mi)		M mi)
		CERT	STD	CERT	STD	CERT	STD	CERT	STD	CERT	STD
FTP@50K	GASOLINE - TIER 2 UNLEADED	0.014	0.040	0.4	1.7	0.03	0.05		8	*	*
FTP@UL	GASOLINE - TIER 2 UNLEADED	0.016	0.055	0.5	2.1	0.03	0.07	*	11	*	0.01
50°F @4K	GASOLINE - TIER 2 UNLEADED	0.014	0.080	0.1	1.7	0.04	0.05	*	16		

	EUEL TYPE	NOx	(g/mi)	CO (g/mi)		
	FUEL TYPE	CERT	STD	CERT	STD	
HWFET @ 50K	GASOLINE - TIER 2 UNLEADED	0.01	0.07		g e	
HWFET @ UL	GASOLINE - TIER 2 UNLEADED	0.01	0.09			
20°F @ 50K	GASOLINE-COLD CO HIGH OCTANE			1.1	10.0	

SFTP EXHAUST EMISSION STANDARDS AND CERTIFICATION LEVELS

				US06		SC03	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)	
	GASOLINE	CERT	0.07	0.4		0.02	0.2				
@ 4K	- TIER 2 UNLEADED	STD	0.14	8.0		0.20	2.7			1.4. 1.4. 1.4. 1.4. 1.4. 1.4.	
		CERT	*	*	*	*	*	*	*	*	
@ UL	*	STD	*	*	*	*	*	*	*	*	
		BIN	A Section of	78 FS. 3				*	1		

WHOLE VEHICLE EVAPORATIVE EMISSION STANDARDS AND CERTIFICATION LEVELS

	EWADODATIVE	FUEL TYPE		WHOLE \	BI (=/=:) @ III					
5	EVAPORATIVE		3DHS (g/test) @ UL			2DI	HS (g/test) @	D UL	RL (g/mi) @ UL	
			CERT	STD	FEL	CERT	STD	FEL	CERT	STD
	GBMXR0130N54	GASOLINE - TIER 2 UNLEADED	0.31	0.50	*	0.33	0.65	*	0.01	0.05

UNLEADED

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ORVR / FUI	EL ONLY / CA	NISTER	BLEED	EVAPORATIVE	EMISSION	STANDA	RDS AND	CERTIFICA	ATION LEV	ELS	
				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	
GBMXR0130N54	GASOLINE -	0.00	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

1									
MAKE	MAKE MODEL		ENGINE (L)	TRANS TYPE	EVAPORATIVE FAMILY	EXH ECS	OBD	PZEV TYPE	
BMW	5501	PC	4.4	SA8	GBMXR0130N54	1	P	*	
BMW	5501 XDRIVE	PC	4.4	SA8	GBMXR0130N54	1	P	*	
BMW	5501 XDRIVE GRAN TURISMO	PC	4.4	SA8	GBMXR0130N54	1	P	*	
BMW	650I CONVERTIBLE	PC	4.4	SA8	GBMXR0130N54	1	P	*	
BMW	650I COUPE	PC	4.4	SA8	GBMXR0130N54	1	P	*	
BMW	6501 GRAN COUPE	PC .	4.4	SA8	GBMXR0130N54	1	P	*	
BMW	6501 XDRIVE CONVERTIBLE	PC	4.4	SA8	GBMXR0130N54	1	P	*	
BMW	6501 XDRIVE COUPE	PC	4.4	SA	GBMXR0130N54	1	P	*	
BMW	6501 XDRIVE GRAN COUPE	PC	4.4	SA8	GBMXR0130N54	1	P	*	
BMW	ALPINA B6 GRAN COUPE XDRIVE	PC	4.4	SA8	GBMXR0130N54	1	P	*	