

Pursuant to the authority vested in California 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-19-095;

IT IS ORDERED AND RESOLVED: That 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															
MOD YEA					VEHIC	LE CLASS(E		FUEL C	ATEGORY		FUEL TYPE				
2022 NBMXV02.0B46						PC				SINGLE FUEL HICLE		GASOLINE			
	USEFL	JL LIFE	E (miles)		VEH	IICLE EMISS	CATE	GORY	INTERIM / IN	TERN	ERMEDIATE IN-USE STD				
EXH/ORVR EVAP						FTP		SFTP FTP				SFTP			
1	50000		150000		LEV3	SULEV30	LEV	3 C	OMPOSITE	*		PM			
SPECIAL FEATURES & EXHAUST E SYSTEMS						ON CONTRO	L		OBD S	TATUS	EN	ENGINE DISPLACEMENT (L)			
1	DFI,	TC,	CAC, WU-	TWC,	TWC, WR	-HO2S, HO2	s		FULL	*					
*	*							F	PARTIAL	ALL MODELS	2.0				
*	* *								RTIAL WITH FINES	*					
EVAPORATIVE & REFUELING (EVAP/ORVR) FAMILY INFORMATION															
EV	EVAP / ORVR FAMILY EVAPORATIVE STD CATEGOR							RY EVAP EMISSION STD VEHICLE CLASS				SPECIAL FEATURES			
NBMXR0100F5X LEV 3 OPTIC						ION2 WITH 1	FEL		I	2C		*			
					E	EMISSION CI	REDI	r inf	ORMATION						
	NMOG+NOX FLEET AVE. CREDIT FOR EXTENDED WARRANTY							ZEV NMOG CREDIT FOR DOR				OPTIONAL EXH. STD FOR WORK TRUCKS			
		N				N			N N						
					NMOG	AND FLEET	AVE	RAG	E INFORMA	TION					
NMOG RAF	CH4 RAF					0-375									
*	*								*						

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. (As applicable, heavy-duty vehicles (HDV) over 14,000 pounds in GVWR listed in this Executive Order are certified to the requirements in 13 CCR Section 1961.2 applicable to MDV pursuant to 13 CCR Section 1956.8(c)(3) or 13 CCR Section 1956.8(h)(5), as applicable.)



## 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 fleet average compliance requirement for NMOG+NOx or Vehicle Equivalent Credit (13 CCR Sections 1961.2(b)(1), 1961.2(b)(3), or 1961.2(c) (3), and the incorporated test procedures, as applicable), or Greenhouse Gas Emissions (13 CCR Section 1961.3, or 17 CCR Section 95663, and the incorporated test procedures, as applicable), for PC, LDT, MDPV or MDV 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: Vehicles certified under this Executive Order shall not be introduced into commerce before January 2, 2021.

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 on this <u>23rd</u> day of December 2020.

Allen/Lyons, Chief Emissions Certification and Compliance Division



FUEL TYPE

# 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

			NMOG (g/I			O mi)		Ox mi)		HC (mg			Pl (g/r	
			CERT	STD	CERT	STD	CERT	STD		CERT	STD	CEF	रा	STD
FTP@50K	50K *		*	*	*	*	*	*		*	*	*		*
FTP@UL	GASOLINE- TIER3 E10		0.014	0.030	0.3	1.0	*	*		*	4	0.0	02	0.003
50°F @4K		OLINE- R3 E10	0.011	0.060	0.5	1.0	*	*		*	8			
					-		NN	NMOG+NOx (g/mi) CO (g/m					g/mi)	
				FUEL TYPE				CERT STD		STD	CER	Т		STD
HWFET @ 50K				*		*	*		*					
HWFET @	D UL	UL GASOLINE-TIER3 E10					0.0	08	0	.030				
20°F @ 50K		COLD C					0.6			10.0				

#### SFTP EXHAUST EMISSION STANDARDS AND CERTIFICATION LEVELS

SFTP EXHAUST EMISSION STANDARDS AND CERTIFICATION LEVELS																		
				US06					SC03			COMPOSITE						
	FUEL TYPE				MOG+NOx (g/mi)		CO PM (g/mi) (mg/			NMOG+NOx (g/mi)		CO (g/mi)	NMOG+N (g/mi		x	CO (g/mi)	PM (mg/mi)	
@ 4K	@4K *		CERT	*			*				*	*						
-		Γ	STD	*			*				*	*						
			CERT	*			* 4		l		* *		0.015			0.3	*	
@ UL	@ UL GASOLINE- TIER3 E10				*		*		5		*	*	0.070		4.2		*	
			BIN										(	0.050				
		WHO	OLE VEI	HICLE E	/APO	RA	TIVE EN	NISSION	STAN	IDAR	DS AND C	CERTIFICA	TIO	N LEVE	LS			
			W					DLE VEHICLE EVAPORATIVE TESTING										
	ORATIVE	FUEL TYPE		PE	3DHS (g/			/test) @ UL			2DHS (g/test) @ UL			RL (g/mi) @ U			UL	
				CE	CERT S		TD	FEL	CEI	CERT STD		FEL	FEL		RT		STD	
NBMXR0100F5X			ASOLINI EV3 E1 PREM	_			300	0.300	0.2	36	0.300	0.300		0 0.04		4 0.05		
(	ORVR / FUI	EL O	NLY/C	ANISTE	R BLE	ED	EVAPO	ORATIVE	EMIS	SION	I STANDA	RDS AND	CEF	RTIFICA	TIO	N LEVE	ELS	
									FL	JEL C	ONLY EVA	P & CANIS	STEI	R BLEE	D			
	EVAPORATIVE FAMILY		ORVR (g/gal		on) @ UL		FUEL	3 FUEL TYPE		OHS RIG TEST g/test) @ UL		2DHS RIG (g/test) @				EED CANISTER ST (g/test) @ 4K		
		FUE	EL TYPE	CERT	ST	D			CE	RT	STD	CERT		STD	С	ERT	STD	
NBMXR0100F5X			SOLINE- ER3 E1(	0 04	0.3	20	LEV3	LINE- 3 E10 REM	,	+	*	*		*	0.	.009	0.020	



BAYERISCHE MOTOREN WERKE AG

EFFECTIVE LEAK DIAMETER STANDARD AND CERTIFICATION LEVEL (INCHES)									
EVAPORATIVE FAMILY	LEAK FAMILY	CERT	STD						
NBMXR0100F5X	NBMXR0100F5X-001	0.00	0.02						

: not applicable; #: pounds; UL: useful life; PC: passenger car; LDT: light-duty truck; LDT1: LDT<6000#GVWR,0-3750#LVW; LDT2: .DT<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; 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; HP/LP EGR: High/Low Pressure EGR; 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; FFH: fuel fired heater; 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; a hyphen (-) between after treatment ECS indicates multiple functionalities of the after treatment device (ex. DPF-SCRC; SCR coated DPF); 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; AER: all-electric range; EAER: equivalent AER; PHEV: plug-in hybrid electric vehicle; NMOG + NOx Fleet Ave. Credit for Extended Warranty: N = no credits, Y = credits, S = credits for some/select models

2022 MODEL	YEAR: VEHICLE MODELS INFORMATION	

MAKE	MODEL	VEH CLASS	ENGINE (L)	TRANS TYPE	EVAPORATIVE FAMILY	EXH ECS	OBD
MINI	MINI COOPER S CONVERTIBLE	PC	2.0	AMS7,M6	NBMXR0100F5X	1	P
MINI	MINI COOPER S HARDTOP 2 DOOR	PC	2.0	AMS7,M6	NBMXR0100F5X	1	P
MINI	MINI COOPER S HARDTOP 4 DOOR	PC	2.0	AMS7,M6	NBMXR0100F5X	1	P
MINI	MINI JOHN COOPER WORKS CONVERTIBLE	PC	2.0	SA8	NBMXR0100F5X	1	P
MINI	MINI JOHN COOPER WORKS HARDTOP 2 DOOR	PC	2.0	M6, SA8	NBMXR0100F5X	1	P