

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 GRC	UP II	NFOR	MATION					
MODE		TEST GROUP		VEHIC	LE CLASS(E	E CLASS(ES) FUEL C			CATEGORY		FUEL TYPE		
2023	3 Р	TKXV02.5CDB			PC				ED SINGLE FUEL /EHICLE		GASOLINE		
	USEFU	IL LIFE (miles)	VEH	IICLE EMISS	ION (ON CATEGORY INTERIM / IN				FERMEDIATE IN-USE STD			
EXI	I/ORVR	EVA	C		FTP		SFTP FTP				SFTP		
1!	50000	1500	00	LEV3	SULEV30	LEV	3 C	MPOSITE	*		PM		
SPECIAL FEATURES & EXHAUST EMISSION CONTROL SYSTEMS								OBD S	TATUS	ENGINE DISPLACEMENT (L)			
1	TWC, W	WU-TWC, HO2	S, WR	-HO2S, DF	I, EGR, EG	RC		FULL	*				
*	*							ARTIAL	ALL MODELS		2.5		
*			r	*			PAR	PARTIAL WITH *					
• • •			EVAP	ORATIVE &	REFUELING	(EVA	AP/OR	VR) FAMIL	INFORMATION				
EVA	EVAP / ORVR FAMILY EVAPORATIVE STD CATEGOR							EVAP EMISSION STD VEHICLE CLASS			SPECIAL FEATURES		
	ptkxr0	098GDP	1	LEV 3 OPTI	ON2 WITH	FEL		PC			HCT		
				E	EMISSION CI	REDI	T INFO	ORMATION					
	NMOG+NOX FLEET AVE. CREDIT FOR EXTENDED WARRANTY										OPTIONAL EXH. STD FOR WORK TRUCKS		
		N			N				N		N		
				NMOG	AND FLEET	AVE	RAG		TION				
NMOG RAF	CH4 RAF					0-375							
*	*	1.10		*	0	.044		0.047			*		

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).

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

This Executive Order hereby cancels and supersedes Executive Order A-016-0490 dated September 2, 2022.

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

Executed on this 27th day of September 2022.

Slin U. Lang

Robin U. Lang, 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+NOx CO (g/mi) (g/mi) CERT STD CERT STD				-	-	NOx (g/mi)			HCHO (mg/mi)		PM (g/mi)
			CERT	STD	CERT	STD	CER	T STD				
FTP@50K	К *		*	*	*	*	*	*	*	*	*	*
FTP@UL	GASOLINE- LEV3 E10		0.026	0.030	0.3	1.0	*	*	*	4	0.00	1 0.003
50°F @4K	GASOLINE- LEV3 E10		0.031	0.060	0.3	1.0	*	*	*	8		
					NN	NMOG+NOx (g/mi)			CO (g/mi)			
		FUEL TYPE						RT	STD	CER	Т	STD
HWFET @ 50K		*					*	•	*			
HWFET @	@ UL	GASOLINE-LEV3 E10)14	0.030			
20°F @ 50K		COLD CO E10 REGULAR GASOLINE (TIER3)								0.6	5	10.0

SFTP EXHAUST EMISSION STANDARDS AND CERTIFICATION LEVELS

			5611			122101	I STANDA	ARD2	AND	CERTIFIC	ATION LE	VELS		
						JS06				SC03		C	OMPOSITE	
	FUEL TY	PE	1	NMOG+N		CO	Pl)G+NOx	CO	NMOG+NO		PM (mg/mi)
				(g/mi)		(g/mi)	(mg/	/mi)	(g/mi)	(g/mi)	(g/mi)	(g/mi)	(mg/mi)
@ 4K	*		ERT	*	* *					*	*			
			STD	*		*			*		*			
		C	CERT	*		*	2	2		*	*	0.026	0.3	*
@ UL	GASOLIN LEV3 E1		STD	*		*	6	5		*	*	0.063	4.2	*
			BIN									0.040		
WHOLE VEHICLE EVAPORATIVE EMISSION STANDARDS AND CERTIFICATION LEVELS														
					W	HOLE V	/EHICLE	EVAP	ORAT	IVE TEST	ING			
	ORATIVE AMILY	FU	EL TYPE	Ξ 3	DHS (g	/test) @	DUL		ORATIVE TESTING 2DHS (g/test) @ UL RL (g/mi) @ UL		0 UL			
				CEF	CERT		FEL	CEF	RL	STD	FEL	CE	RT	STD
PTKXI	R0098GDP		SOLINE- V3 E10	10 2	91 0	. 300	0.300	0.1	65	0.300	0.30	0.0	00	0.05
(ORVR / FUI	EL ON	NLY / CA	NISTER	BLEED) EVAP	ORATIVE	EMIS	SION	STANDA	RDS AND	CERTIFICA	TION LEV	ELS
								FU	IEL C	NLY EVA	P & CANIS	STER BLEE	D	
	ORATIVE AMILY	O	RVR (g/	gallon) @	0 UL	FUE	L TYPE			IG TEST) @ UL		RIG TEST t) @ UL		ANISTER est) @ 4K
		FUE	L TYPE	CERT	STD			CEI	RT	STD	CERT	STD	CERT	STD
PTKX	R0098GDP		OLINE- R3 E10	0.00	0.20		OLINE- 73 E10	*		*	*	*	0.011	0.020



EFFECTIVE LEAK DIAMETER STANDARD AND CERTIFICATION LEVEL (INCHES)										
EVAPORATIVE FAMILY	LEAK FAMILY	CERT	STD							
PTKXR0098GDP	PTKXR0098GDP-001	*	0.02							
: 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; 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

2023 MODEL YEAR: VEHICLE MODELS INFORMATION

MAKE	MODEL	VEH CLASS	ENGINE (L)	TRANS TYPE	EVAPORATIVE FAMILY	EXH ECS	OBD
MAZDA	CX-30 WITH CYLINDER DEACTIVATION	PC	2.5	SA6	PTKXR0098GDP	1	P