

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 GRO	UP II	NFOR	MATION					
MODE YEA		TES	ST GROUP	VEHICLE CLASS(ES)					FUEL CATEGORY			FUEL TYPE		
2023	3	PMA	XJ03.0TJI		LDT2				DEDICATED SINGLE FUEL VEHICLE			GASOLINE		
USEFUL LIFE (miles) VEHICLE EMISSION CA							CATE	GORY INTERIM / INTERMEDIATE IN-USE						
EXI	H/ORV	/R	EVAP			FTP		SF	ТР	FTP		SFTP		
1!	50000)	150000)	LEV3	ULEV70	LEV	3 C	OMPOSITE	*		PM		
SPECIAL FEATURES & EXHAUST EMISSION CONTROL SYSTEMS						L		OBD S	TATUS	EN	ENGINE DISPLACEMENT			
1	DFI, SFI, 2TC, 2CAC, 2WR-HO2S, 2TWC, 2HO2S								FULL	ALL MODELS				
*	*							P	ARTIAL	*	3.0			
*	* *							PAR	TIAL WITH	*				
	EVAPORATIVE & REFUELING (EVAP/ORVR) FAMILY INFORMATION													
EVA	AP / O	RVR	FAMILY	EVA	PORATIVE	E STD CATE	GOR	,	EVAP EMISSION STD VEHICLE CLASS			SPECIAL FEATURES		
	PMAXF	R011	2182		LEV 3	OPTION2			LD	т2	*			
					E	EMISSION CI	REDI	r info	ORMATION					
	REDIT	FOR	FLEET AVE. REXTENDED RANTY			EDIT FOR N ZERO-EVAP	ON-P	ZEV	ZEV NMOG CREDIT FOR DOR			OPTIONAL EXH. STD FOR WORK TRUCKS		
		ľ	1			N				N		N		
					NMOG	AND FLEET	AVE	RAG		TION				
NMOG RAF	CH RA		FTP NMOG/NMHC RATIO		HO/NMHC RATIO NMOG+NOX FLI PC+LDT (0-375 (g/mi)									
*	*		1.04		*	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.

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

Executed on this 4th day of August 2022.

Jolin 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 (g/mi)		CO (g/mi)		NOx (g/mi)		HCHO (mg/mi)		PM (g/mi)	
		CERT	STD	CERT	STD	CERT	STD	CERT	STD	CERT	STD
FTP@50K	*	*	*	*	*	*	*	*	*	*	*
FTP@UL	GASOLINE- TIER3 E10 PREM	0.059	0.070	0.3	1.7	*	*	*	4	0.001	0.003
50°F @4K	GASOLINE- TIER3 E10 PREM	0.063	0.140	0.4	1.7	*	*	*	16		
							IOG+NOx	(a/mi)		CO (a/mi)	

	FUEL TYPE	NMOG+N	Ox (g/mi)	CO (g/mi)		
	FOELTIFE	CERT	STD	CERT	STD	
HWFET @ 50K	*	*	*			
HWFET @ UL	GASOLINE-TIER3 E10 PREM	0.040	0.070			
20°F @ 50K	COLD CO E10 PREMIUM GASOLINE (TIER3)			0.8	12.5	

SFTP EXHAUST EMISSION STANDARDS AND CERTIFICATION LEVELS

		0			TANBANDO					
				US06		SC03	3	COM	IPOSITE	
	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	*	*		*	*			
-		STD	*	*		*	*			
		CERT	*	*	0	*	*	0.049	0.4	*
@ UL	GASOLINE- TIER3 E10 PREM	STD	*	*	6	*	*	0.063	4.2	*
		BIN						0.070		
	WH	OLE VE	HICLE EVAPOR	RATIVE EMI	SSION STAN	NDARDS AND	CERTIFIC	ATION LEVELS	;	

			W	HOLE \	/EHICLE	EVAPORA	TIVE TEST	ING					
EVAPORATIVE FAMILY	FUEL TYPE	3	3DHS (g/test) @ UL				2DHS (g/test) @ UL				RL (g/mi) @ UL		
		CEF	RT S	STD	FEL	CERT	ZDHS (greest) @ UL CERT STD FEL CERT 0.210 0.400 * 0.00 MISSION STANDARDS AND CERTIFICATION LEV FUEL ONLY EVAP & CANISTER BLEED 3DHS RIG TEST 2DHS RIG TEST	STD					
PMAXR0112182	GASOLINE- TIER3 E10	0 2	60 0	. 400	*	0.210	0.400	*	0.	00	0.05		
ORVR / FUI	ORVR / FUEL ONLY / CANISTER BLEED EVAPORATIVE EMISSION STANDARDS AND CERTIFICATION LEVELS												
						FUEL C	ONLY EVAP	2 & CANIS	TER BLEE	D			
EVAPORATIVE	ORVR (g/g	ORVR (g/gallon) @ UL				3DHS RIG TEST		2DHS RIG TEST		BLEED CANISTER			
FAMILY				FUE	L TYPE	(g/test) @ UL		(g/test) @ UL	TEST (g/t	ST (g/test) @ 4K		
	FUEL TYPE	CERT	STD			CERT	STD	CERT	STD	CERT	STD		
PMAXR0112182	GASOLINE- TIER3 E10	0.03	0.20		OLINE- R3 E10	*	*	*	*	0.008	0.020		

CALIFORNIA

EFFECTIVE LEAK DIAMETER STANDARD AND CERTIFICATION LEVEL (INCHES)									
EVAPORATIVE FAMILY	LEAK FAMILY	CERT	STD						
PMAXR0112182	PMAXR0112182-LF1	*	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

N	IAKE	MODEL	VEH CLASS	ENGINE (L)	TRANS TYPE	EVAPORATIVE FAMILY	EXH ECS	OBD
MAS	SERATI	GRECALE TROFEO	LDT2	3.0	A8	PMAXR0112182	1	F