

Executive Order: A-518-0002

New Passenger Cars, Light-Duty Trucks and Medium-Duty Vehicles

Page 1 of 4

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													
MODE		TEST GROUP VEHICLE CLASS(ES)						FUEL CATEGORY			FUEL TYPE		
202	4 RI	ALT03.0001			LDT4			DEDICATED SINGLE FUEL VEHICLE			GASOLINE		
	USEFUL	LIFE (miles)	•	VEH	IICLE EMISS	CLE EMISSION CATEGORY INTERIM / INT				ITERM	ERMEDIATE IN-USE STD		
EXI	I/ORVR	EVAP			FTP		SF	TP	FTP		SFTP		
1.	50000	150000		LEV3	ULEV50	LEV	3 C	MPOSITE	*		*		
SPI	CIAL FE	ATURES & EXI	HAUS TEM		ON CONTRO	L		OBD STATUS			ENGINE DISPLACEMENT (L)		
1	T	WC, WR-HO2S,	но2	S, DFI,	TC, CAC			FULL	*				
*			*				Р	ARTIAL	IAL ALL MODELS		3.0		
*	* *							TIAL WITH FINES	*				
	EVAPORATIVE & REFUELING (EVAP/ORVR) FAMILY INFORMATION												
EVA	AP / ORV	R FAMILY	EVA	PORATIVE	E STD CATE	GORY	VEHICLE CLASS			SP	SPECIAL FEATURES		
	RIALR01	.80001		LEV 3	OPTION2		LDT4				*		
				ı	EMISSION CI	REDIT	INFO	ORMATION					
	REDIT FO	X FLEET AVE. OR EXTENDED RRANTY			REDIT FOR N ZERO-EVAP	ON-P	NMOG CREDIT FOR DOR			R I	OPTIONAL EXH. STD FOR WORK TRUCKS		
	N N								N		N		
				NMOG	AND FLEET	AVE	RAGI	INFORMA	TION				
NMOG RAF	CH4 RAF	FTP NMOG/NMHC RATIO		HO/NMHC RATIO	NMOG+NO PC+LDT (V) LDT	NMOG+NOX FLEET ST LDT (3751 LVW-8500 GVWR) + MDPV (g/mi)		MOG+NOX FLEET STD MDV (10,001-14,000 GVWR) (g/mi)			
*	*	1.10		*	0	.051			0.051		*		

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.)



Executive Order: A-518-0002

New Passenger Cars, Light-Duty Trucks and Medium-Duty Vehicles

Page 2 of 4

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 18th day of October 2023.

Robin U. Lang, Chief

Emissions Certification and Compliance Division

Holin U. Lang

Executive Order: A-518-0002

New Passenger Cars, Light-Duty Trucks and Medium-Duty Vehicles

Page 3 of 4

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

FUEL TYPE

		NMOG+NOx (g/mi)		Ox 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	0.032	0.050	0.6	1.7	*	*	2	4	0.001	0.003
50°F @4K	GASOLINE- TIER3 E10 PREM	0.030	0.100	0.5	1.7	*	*	2.8	16		

	FUEL TYPE	NMOG+N	Ox (g/mi)	CO (g/mi)
	FUEL TIPE	CERT	STD	CERT	STD
HWFET @ 50K	*	*	*		
HWFET @ UL	GASOLINE-TIER3 E10 PREM	0.016	0.050		
20°F @ 50K	GASOLINE-TIER3 E10 PREM			1.5	12.5

SFTP EXHAUST EMISSION STANDARDS AND CERTIFICATION LEVELS

				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	*	*		*	*			
		STD	*	*		*	*			
		CERT	*	*	1.9	*	*	0.027	1.2	*
@ UL	GASOLINE- TIER3 E10 PREM	STD	*	*	6	*	*	0.057	4.2	*
		BIN						0.050		

WHOLE VEHICLE EVAPORATIVE EMISSION STANDARDS AND CERTIFICATION LEVELS

EVAPORATIVE FAMILY			WHOLE \						
	FUEL TYPE	E 3DHS (g/test) @ UL			2DI	HS (g/test) (RL (g/mi) @ UL		
		CERT	STD	FEL	CERT	STD	FEL	CERT	STD
RIALR0180001	GASOLINE- LEV3 E10 PREM	0.292	0.500	*	0.358	0.500	*	0.00	0.05



Executive Order: A-518-0002

New Passenger Cars, Light-Duty Trucks and Medium-Duty Vehicles

Page 4 of 4

ORVR / FUI	EL ONLY / C	ANISTER	BLEED	EVAPOR	RATIVE	EMISSION	STANDA	RDS AN	D CERTIFIC	ATION LEV	ELS	
				FUEL ONLY EVAP & CANISTER BLEED								
EVAPORATIVE FAMILY	ORVR (g/gallon) @ UL		tVR (g/gallon) @ UL			3DHS R (g/test	IG TEST) @ UL		RIG TEST est) @ UL		ANISTER est) @ 4K	
	FUEL TYPE	CERT	STD			CERT	STD	CERT	STD	BLEED C TEST (g/t CERT	STD	
RIALR0180001	GASOLINE- LEV3 E10 PREM	0.13	0.20	GASOLINE- LEV3 E10 PREM		*	*	*	*	0.006	0.020	
I	FFECTIVE	LEAK D	IAMET	ER STA	NDARI	D AND CE	RTIFICA	TION LI	EVEL (INC	HES)		
EVAPORATIVE	FAMILY	LEA	K FAMII	_Y			CERT			STD		
RIALR0180	001	RIALRO	180001	-001		0.0	002			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; cGPF (coated gasoline particulate filter); 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

2024 MODEL YEAR: VEHICLE MODELS INFORMATION

MAKE	MODEL	VEH CLASS	ENGINE (L)	TRANS TYPE	EVAPORATIVE FAMILY	EXH ECS	OBD
INEOS	GRENADIER FIELDMASTER	LDT4	3.0	SA8	RIALR0180001	1	P
INEOS	GRENADIER STATION WAGON	LDT4	3.0	SA8	RIALR0180001	1	P
INEOS	GRENADIER TRIALMASTER	LDT4	3.0	SA8	RIALR0180001	1	P
INEOS	QUARTERMASTER	LDT4	3.0	SA8	RIALR0180001	1	P