

Executive Order: A-401-0021

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: The following vehicles produced by the manufacturer are certified as plug-in hybrid electric vehicles pursuant to Title 13, California Code of Regulations (13 CCR) Sections 1961 or 1961.2, 1962.2, 1976, 1978 and the incorporated test procedures. Production vehicles shall be in all material respects the same as those for which certification is granted.

	TEST GROUP INFORMATION													
MODE YEAR	- I TI	EST GROUP		VEHIC	LE CLASS(I	ES)		FUEI	L C	CATEGORY			FUEL TYPE	
2022	NM	LNV03.0M16			PC	PLUG-IN HYBRID ELECTRIC VEHICLE				GASOLINE				
USEFUL LIFE (miles) VEHICLE						SION C	ATI	EGORY		INTERIM / IN	TE	ERMEDIATE IN-USE STD		
EXH	/ORVR	EVAP			FTP		S	FTP		FTP		SFTP		
15	0000	150000		LEV3	ULEV50	LEV	3 (	COMPOSITE		*			PM	
SPECIAL FEATURES & EXHAUST EMISSION CONTROL SYSTEMS						DL		OBD	S	TATUS		ENG	GINE DISPLACEMENT (L)	
1	2TWC(2), 2WR-HO2S, 2HO2S, DFI, 2TC, 2CAC							FULL		*				
*			*			PARTIAL		ALL MODELS			3.0			
*	*							RTIAL WIT	Η	*				
EVAPORATIVE & REFUELING (EVAP/ORVR) FAMILY INFORMATION														
EVA	P / ORV	R FAMILY	EVAP	ORATIVE	STD CATE	GORY	Y EVAP EMISSION STD VEHICLE CLASS				SPECIAL FEATURES			
N	MLNR01	.30M16	LEV	J 3 OPTI	3 OPTION2 WITH FEL				PC			*		
		•		E	EMISSION C	REDIT	INI	ORMATIO	N					
ALL	GR	E FOR TEST OUP EV	E. CREDIT FOR NON-PZI		PZE	REDIT FOR EV ZERO- 'AP	V ZERO- NMOG CREDIT I		FC	FOR OPTIONAL EXH. STD FOR WORK TRUCKS				
		*		N			1	N		N			N	
			•	NMOG	AND FLEE	T AVE	RAC	GE INFORM	ΙA.	TION				
NMOG RAF	CH4 RAF	FTP NMOG/NMHC RATIO		O/NMHC ATIO	PC+LDT	C+LDT (0-3750 LVW)			NMOG+NOX FLEET STD LDT (3751 LVW-8500 GVWR) + MDPV (g/mi)			NMOG+NOX FLEET STD MDV (10,001-14,000 GVWR) (g/mi)		
*	*	1.10		*		0.051			0.051			*		
Soo th	See the Attachment for Vehicle Models, Evanorative Family, Engine Displacement, Emission Control Systems, Phase-													

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-401-0021

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).

### BE IT FURTHER RESOLVED:

The listed vehicle models have been certified on the condition that the manufacturer provide all the on-board diagnostic data required by 13 CCR Section 1968.2(h)(1). Failure to submit the required demonstration data by November 26, 2021 (120 days from the date of the OBD approval letter E-21-201), or failure of the submitted demonstration data to show compliance with the test procedures, shall be cause for the Air Resources Board to revoke this Executive Order and vehicles sold under the revoked conditional certification shall be deemed uncertified and subject to a civil penalty of up to \$40,725 per violation per vehicle pursuant to HSC Section 43154.

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 20th day of October 2021.

Allen Lyons, Chief

**Emissions Certification and Compliance Division** 



Executive Order: A-401-0021

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)		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	0.030	0.050	0.3	1.7	*	*	0.2	4	0.0013	0.003	
50°F @4K	GASOLINE- TIER3 E10 PREM	0.035	0.100	0.4	1.7	*	*	0.4	16			

	FUEL TYPE	NMOG+N	lOx (g/mi)	CO (g/mi)		
	FUEL TIPE	CERT	STD	CERT	STD	
HWFET @ 50K	*	*	*			
HWFET @ UL	GASOLINE-TIER3 E10 PREM	0.010	0.050			
20°F @ 50K	GASOLINE-TIER3 E10 PREM			1.2	10.0	

### 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	*	*	2.2	*	*	0.020	0.3	*
@ UL	GASOLINE- TIER3 E10 PREM	STD	*	*	6	*	*	0.070	4.2	*
		BIN						0.030		

#### WHOLE VEHICLE EVAPORATIVE EMISSION STANDARDS AND CERTIFICATION LEVELS

				WHOLE \						
	EVAPORATIVE FAMILY	FUEL TYPE	3DHS (g/test) @ UL			2DI	HS (g/test) (	RL (g/mi) @ UL		
			CERT	STD	FEL	CERT	STD	FEL	CERT	STD
•	NMLNR0130M16	GASOLINE- LEV3 E10 PREM	0.284	0.300	0.300	0.273	0.300	0.300	0.001	0.05



Executive Order: A-401-0021

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

Page 4 of 4

ORVR / FUI	ORVR / FUEL ONLY / CANISTER BLEED EVAPORATIVE EMISSION STANDARDS AND CERTIFICATION LEVELS											
		FUEL ONLY EVAP & CANISTER BLEED										
EVAPORATIVE FAMILY	ORVR (g/gallon) @ UL			FUEL TYPE		3DHS R (g/test	IG TEST ) @ UL		RIG TEST st) @ UL	BLEED CANISTER TEST (g/test) @ 4K		
	<b>FUEL TYPE</b>	CERT	STD			CERT	STD	CERT	STD	CERT	STD	
NMLNR0130M16	GASOLINE- LEV3 E10 PREM	0.089	0.20	GASOLINE- LEV3 E10 PREM		*	*	*	*	0.010	0.020	
I	EFFECTIVE LEAK DIAMETER STANDARD AND CERTIFICATION LEVEL (INCHES)											
EVAPORATIVE FAMILY LEAK FAMIL			Y CERT				STD					
NMLNR0130M16 NMLNR0130M16-			-L16		0.0	03		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

# 2022 MODEL YEAR: VEHICLE MODELS INFORMATION

MODEL NUMBER	MAKE	MODEL	VEH CLASS	ENGINE (L)	TRANS TYPE	EVAPORATIVE FAMILY	EXH ECS	OBD
1	MCLAREN	ARTURA	PC	3.0	AMS8	NMLNR0130M16	1	P

# **ELECTRIC RANGE AND ZEV ALLOWANCE INFORMATION**

MODEL	PHEV TYPE	UDDS AER	UDDS EAER	US06 AER	HIGHW	ZEV		
NUMBER	PHEV TIPE	(MILES)	(MILES)	(MILES)	AER	EAER	ALLOWANCE	
1	*	14.510	14.859	*	16.74	18.76	0.00	