

Executive Order: A-023-0816

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 GRO	UP II	NFOR	MATION						
MODI YEA		EST GROUP		VEHIC	LE CLASS(E	S)		FUEL CATEGORY			FUEL TYPE			
202	2 <b>N</b> H	NXV01.5SDC			PC				SINGLE FUEL HICLE		GASOLINE			
	USEFUL	. LIFE (miles)		VEH	IICLE EMISS	ION C	CATE	GORY	EDIATE IN-USE STD					
EX	I/ORVR	EVAP			FTP		SF	TP	FTP		SFTP			
1	50000	150000		LEV3	ULEV50	LEV	3 CC	MPOSITE	*		PM			
SP	CIAL FE	ATURES & EX	HAUS		ON CONTRO	L		OBD S	TATUS	EN	GINE DISPLACEMENT (L)			
1	T	WC, WR-HO2S,	HO2	S, DFI,	TC, CAC			FULL	*					
*	* *						Р	ARTIAL	ALL MODELS		1.5			
*	* *							TIAL WITH FINES	*					
	EVAPORATIVE & REFUELING (EVAP/ORVR) FAMILY INFORMATION													
EV	AP / ORV	R FAMILY	EVA	PORATIVE	STD CATE	GORY	,		SSION STD E CLASS	SP	ECIAL FEATURES			
	NHNXR01	27VSA		LEV 3	OPTION2		PC			*				
				I	EMISSION CI	REDIT	INFO	RMATION						
	REDIT FO	X FLEET AVE. OR EXTENDED RRANTY			REDIT FOR N ZERO-EVAP	ON-P	ZEV	NMOG C	REDIT FOR DO	_	OPTIONAL EXH. STD FOR WORK TRUCKS			
		N			N				N		N			
				NMOG	AND FLEET	AVE	RAGI	INFORMA	TION					
NMOG RAF	NMOG RAF RAF RATIO FTP NMOG/NMHC RATIO HCHO/NMHC PC+LDT (0-37 (g/mi)				0-375	_	/) LDT	+NOX FLEET S (3751 LVW-8500 R) + MDPV (g/m	)	MOG+NOX FLEET STD MDV (10,001-14,000 GVWR) (g/mi)				
*	*	1.10		0.05	0	.051			0.056		*			

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-023-0816

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 2021.

Allen Lyons, Chief

**Emissions Certification and Compliance Division** 

Executive Order: A-023-0816 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 I EVELS (FTP. HWEET, 50°F, 20°F)

CH4: methane; NMOG: non-CH4 organic gas; HC: hydrocarbon; NMHC: non-CH4 HC; CO: carbon
TO NO THE COLOR OF THE PART OF THE COLOR

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)				NOx (g/mi)		HCHO (mg/mi)		PM (g/mi)	
		CERT	STD	CERT	STD	CERT	STD	CERT	STD	CERT	STD
FTP@50K	*	*	*	*	*	*	*	*	*	*	*
FTP@UL	GASOLINE- LEV3 E10	0.020	0.050	0.4	1.7	*	*	0	4	0.000	0.003
50°F @4K	*	*	*	*	*	*	*	*	*		

	FUEL TYPE	NMOG+N	Ox (g/mi)	CO (g/mi)		
	FUELTIPE	CERT	STD	CERT	STD	
HWFET @ 50K	*	*	*			
HWFET @ UL	GASOLINE-LEV3 E10	0.009	0.050			
20°F @ 50K	COLD CO E10 REGULAR GASOLINE (TIER3)			0.4	10.0	

## SFTP EXHAUST EMISSION STANDARDS AND CERTIFICATION LEVELS

			US06			SC0:	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	K *	CERT	*	*		*	*			
		STD	*	*		*	*			
		CERT	*	*	2	*	*	0.016	0.5	*
@ UL	GASOLINE- LEV3 E10	STD	*	*	6	*	*	0.070	4.2	*
		BIN						0.080		

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

	FUEL TYPE		WHOLE \						
EVAPORATIVE FAMILY		3DHS (g/test) @ UL			2DI	HS (g/test) (	RL (g/mi) @ UL		
		CERT	STD	FEL	CERT	STD	FEL	CERT	STD
NHNXR0127VSA	GASOLINE- LEV3 E10	0.174	0.300	*	0.155	0.300	*	0.00	0.05

## 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 RIG TEST (g/test) @ UL		2DHS RIG TEST (g/test) @ UL		BLEED CANISTER TEST (g/test) @ 4K			
	<b>FUEL TYPE</b>	CERT	STD		CERT	STD	CERT	STD	CERT	STD		
NHNXR0127VSA	GASOLINE- TIER3 E10	0.01	0.20	GASOLINE- LEV3 E10	*	*	*	*	0.004	0.020		



Executive Order: A-023-0816

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

Page 4 of 4

EFFECTI\	EFFECTIVE LEAK DIAMETER STANDARD AND CERTIFICATION LEVEL (INCHES)									
EVAPORATIVE FAMILY	LEAK FAMILY	CERT	STD							
NHNXR0127VSA	NHNXR0127VSA-A00	*	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

MAKE	MODEL	VEH CLASS	ENGINE (L)	TRANS TYPE	EVAPORATIVE FAMILY	EXH ECS	OBD
HONDA	CIVIC 4DR SI	PC	1.5	м6	NHNXR0127VSA	1	P