

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	DUP II	NFOR	MATION					
MOD YEA		EST GROUP		VEHICLE CLASS(ES) F				FUEL C	ATEGORY		FUEL TYPE		
202	2 N	NSXD05.6W9A	MDV4 DEDI				-	SINGLE FUEL HICLE		GASOLINE			
	USEFU	L LIFE (miles)	_	VEF	VEHICLE EMISSION CATEGORY				INTERIM / IN	ERM	RMEDIATE IN-USE STD		
EX	I/ORVR	EVAP			FTP		SF	ТР	FTP		SFTP		
150000 150000				LEV3	LEV3 SULEV (F SULEV170 US06, SC03, D TEST CYCLE				*		*		
SPECIAL FEATURES & EXHAUST EMISSION CON SYSTEMS								OBD S	TATUS	EN	GINE DISPLACEMENT (L)		
1		2TWC(2), 2H	02s,	2WR-HO2S	S, DFI			FULL	ALL MODELS				
*			*				Р	ARTIAL	*		5.6		
* *								PARTIAL WITH *]			
		E	VAPO	RATIVE &	REFUELING	(EVA	P/OR		(INFORMATION				
EV	AP / OR	/R FAMILY	EVA	PORATIVI	E STD CATE	GORY	r		SSION STD E CLASS	SP	PECIAL FEATURES		
	NNSXF0	201рна	LI	EV 3 OPTI	ION2 WITH	FEL		MDV4			*		
		·		I	EMISSION CI	REDI	FINFC	ORMATION					
	NMOG+NOX FLEET AVE. CREDIT FOR EXTENDED WARRANTY							ZEV NMOG CREDIT FOR DOF			OPTIONAL EXH. STD FOR WORK TRUCKS		
N N								N			N		
				NMOG	AND FLEET	T AVE	RAG	E INFORMA	TION				
NMOG RAF							500 G				MOG+NOX FLEET STD MDV (10,001-14,000 GVWR) (g/mi)		
*	*	1.10		*	0	.056		0.178 *					

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 <u>15th</u> day of December 2021.

Allen Lyons, 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)		HO /mi)		PM (g/mi)			
			CERT	STD	CERT	STD	CERT	STD	CERT	STD	CEF	RT	STD
FTP@50K		*	*	*	*	*	*	*	*	*	*	* *	
FTP@UL		SOLINE- V3 E10	0.059	0.170	0.3	4.2	*	*	*	6	0.0	01	0.008
50°F @4K	@4K GASOLII LEV3 E				0.3	4.2	*	*	*	16			
				NN	NMOG+NOx (g/mi)			CO (g/mi)					
				FUEL TYP	CE	RT	STD	CERT		STD			
HWFET @ 50I				*			*	*					
HWFET @	2) UL	UL GASOLINE-LEV3 E10						31	0.170				
20°F @ 50K				*				*			*		

SFTP EXHAUST EMISSION STANDARDS AND CERTIFICATION LEVELS

	SFTP EXHAUST EMISSION STANDARDS AND CERTIFICATION LEVELS															
						US06				SC03		C	OMPOS	TE		
	FUEL TY	PE	N	NMOG+N (g/mi)		CO (g/mi)	Pl (mg/			DG+NOx g/mi)	CO (g/mi)	NMOG+NO (g/mi))x C((g/r	-	PM (mg/mi)	
@ 4K	*		RT	*		*				*	*					
-			TD			*				*	*					
	CE		RT	*		*	*	,	*		*	0.055	5.2		2	
@ UL	GASOLIN LEV3 E1	S	STD *		* *		*			*	*	0.450	12	. 0	10	
		В	IN									*				
		WHOL	e vehi	CLE EV	APORA	TIVE E	MISSION	STANE	DAR	DS AND C	ERTIFICA	TION LEVE	LS			
					WHOLE VEHICLE EVAPORATIVE TESTING											
EVAPORATIVE FAMILY		FUEL TYPE		= 3	BDHS (g	S (g/test) @ UL			2DHS (g/test) @		@ UL	F	RL (g/mi) @ U		UL	
				CERT		STD	FEL CE		Т	STD	FEL	CE	RT	STD		
NNSXF0201PHA			OLINE- 3 E10	0.2	73 0	.600 0.600		0.31	1	0.600	0.600	0.0	0.001		0.05	
ORVR / FUEL ONLY / CANISTER BLEED EVAPORATIVE EMISSION STANDARDS AND CERTIFICATION LEVELS										LS						
								FUE	EL O	NLY EVA	P & CANIS	TER BLEE	D			
	ORATIVE	OR	ORVR (g/gallo				L TYPE	3DHS RIC (g/test)				IG TEST) @ UL		BLEED CANIST EST (g/test) @		
		FUEL	TYPE	CERT	STD			CER	RT	STD	CERT	STD	CERT	'	STD	
NNSXF0201PHA			GASOLINE-		0.20	GASOLINE- LEV3 E10		*		*	*	*	0.012	2	0.030	



EFFECTIVE LEAK DIAMETER STANDARD AND CERTIFICATION LEVEL (INCHES)										
EVAPORATIVE FAMILY	LEAK FAMILY	CERT	STD							
NNSXF0201PHA	NNSXF0201PHA-001	*	0.02							

ː: 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)	GINE (L) TRANS TYPE EVAPORATIVE FAMILY		EXH ECS	OBD
NISSAN	TITAN XD 4WD	MDV4	5.6	SA9	NNSXF0201PHA	1	F