

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													
MODI YEA		TEST GROUP VEHICLE CLASS(ES)						FUEL C	ATEGORY		FUEL TYPE		
202	2 NKMXT03.5KU5 LDT2						DEDICATED SINGLE FUEL VEHICLE				GASOLINE		
	USEFU	L LIFE (miles)		VEH	IICLE EMISSION CATEGORY INTERIM / INTERMEDIATE IN-U					MEDIATE IN-USE STD			
EX	H/ORVR	EVAP		FTP		SF	FTP FTP			SFTP			
1	50000	15000	)	LEV3	ULEV70	LEV 3 COMPOSITE *				PM			
SPECIAL FEATURES & EXHAUST EMISSION CONTRO SYSTEMS								OBD S	TATUS	E	ENGINE DISPLACEMENT (L)		
1	OFI+SFI	, 2WR-HO2S,	2HO2 EGR		WC, TWC, E	GR,		FULL ALL MODELS					
*			*				Р	PARTIAL *			3.5		
*							TIAL WITH	<b>X</b>		1			
	EVAPORATIVE & REFUELING (EVAP/ORVR) FAMILY INFORMATION												
EV	AP / OR	R FAMILY	EVA	PORATIVE	E STD CATE	GORY	,		SSION STD E CLASS	S	SPECIAL FEATURES		
	NKMXR0	L55KUG		LEV 3	OPTION2			LDT2			*		
				E	EMISSION CI	REDIT	r info	ORMATION					
	REDIT FO	DX FLEET AVE. DR EXTENDED RRANTY			EDIT FOR N ZERO-EVAP	ON-P	ZEV	NMOG C	NMOG CREDIT FOR DOR FOR W				
		N			N			N N					
				NMOG	AND FLEE	Γ AVE	RAG	E INFORMA	TION				
				HO/NMHC RATIO	NMOG+NO PC+LDT ( (g			V) LDT	+NOX FLEET S (3751 LVW-850( R) + MDPV (g/m		NMOG+NOX FLEET STD MDV (10,001-14,000 GVWR) (g/mi)		
*									*				

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).

BE IT FURTHER RESOLVED: Vehicles certified under this Executive Order shall not be introduced into commerce before January 2, 2021.

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 28th day of December 2020.

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 (g/i		-	CO (g/mi)		NOx (g/mi)		HCH (mg/r		PM (g/mi)		
			CERT	STD	CERT STD C		CERT	STD	STD CERT		STD	CEF	RT	STD
FTP@50K		*	*	*	*	*	*	*	*		*	*		*
FTP@UL	GASOLINE- TIER3 E10		0.031	0.070	0.8	1.7	*	*	*		4	0.0	01	0.003
50°F @4K		SOLINE- R3 E10	0.040	0.140	0.5	1.7	*	*	*		16			
				FUEL TYP	NN	NMOG+NOx (g/mi)			CO (g/mi)					
				FUEL ITP	E		CE	RT	STD		CERT STD			STD
HWFET @ 50K				*			*	*		*				
HWFET @	@ UL		GASOI	LINE-TIEF	R3 E10		0.0	)16	0.07	0				
20°F @ 50K		COLD C	CO E10 RE	EGULAR GA	ASOLINE	(TIER3)					0.7			12.5

#### SFTP EXHAUST EMISSION STANDARDS AND CERTIFICATION LEVELS

			361		U31 EI	10123101	STANDA	ARD 3 /	AND	CERTIFIC	ATION LE	VELS			
						US06				SC03		C	OMPOSITI		
	FUEL TYPE			NMOG+NOx		со	PI	РМ		)G+NOx	со	NMOG+NO	x CO	PM	
				(g/mi	)	(g/mi)	(mg	/mi)	()	g/mi)	(g/mi)	(g/mi)	(g/mi)	(mg/mi)	
@ 4K	4K *		CERT	*		*	*		*		*				
-			STD	*		*				*	*				
			CERT	*		*	* 2		*		*	0.032	0.9	*	
@ UL	UL GASOLINE		STD	*	*		6	6		*	*	0.070	4.2	*	
			BIN								0.070				
	WHOLE VEHICLE EVAPORATIVE EMISSION STANDARDS AND CERTIFICATION LEVELS														
WHOLE VEHICLE EVAPORATIVE TESTING															
	ORATIVE			E 3DHS (g		(g/test) @ UL			2DH	IS (g/test)	@ UL	F	RL (g/mi) @ U		
				CERT		STD	STD FEL		ERT STD		FEL	CE	CERT		
NKMXI	NKMXR0155KIIG I		SOLINE EV3 E10	102	74 (	0.400	*	0.21	16	0.400	*	0.	0.00 0.05		
(	ORVR / FUI	EL ON	NLY / CA	NISTER	BLEE	D EVAP	ORATIVE	EMIS	SION	I STANDA	RDS AND	CERTIFICA	TION LEV	'ELS	
								FU	EL C	NLY EVA	P & CANIS	STER BLEE	D		
	ORATIVE	0	RVR (g/	/gallon) @ UL		FUE			HS RIG TEST g/test) @ UL			RIG TEST t) @ UL			
		FUE	L TYPE	CERT	STD			CE	RT	STD	CERT	STD	CERT	STD	
NKMXI	R0155KUG		OLINE- R3 E10	0.00	0.20		OLINE- 73 E10	*		*	*	*	0.006	0.020	



EFFECTIVE LEAK DIAMETER STANDARD AND CERTIFICATION LEVEL (INCHES)									
EVAPORATIVE FAMILY	LEAK FAMILY	CERT	STD						
NKMXR0155KUG	NKMXR0155KUG-KA4	0.00	0.02						

: not applicable; #: pounds; UL: useful life; PC: passenger car; LDT: light-duty truck; LDT1: LDT<6000#GVWR,0-3750#LVW; LDT2: \_DT<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
KIA	CARNIVAL	LDT2	3.5	SA8	NKMXR0155KUG	1	F