

TOYOTA MOTOR CORPORATION

Executive Order: A-014-1011

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

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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-14-012;

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					
MODE	1	EST GROUP		VEHIC	LE CLASS(E	S)		FUEL CATEGORY			FUEL TYPE		
2019) KI	TYXT05.7B6Y		LDT4				DEDICATED SINGLE FUEL VEHICLE			GASOLINE		
USEFUL LIFE (miles) VEHICLE EMISSION					EMISSION CATEGORY INTERIM / INTERMEDIAT					DIATE IN-USE STD			
EXI	I/ORVR	EVAP			FTP		SF	TP	FTP			SFTP	
1:	20000	150000		LEV	2 ULEV	I		SFTP DARD	. *			*	
SPECIAL FEATURES & EXHAUST EMISSION CONTROL SYSTEMS							OBD S	TATUS		ENGI	NE DISPLACEMENT (L)		
1	SF	I, 2AIR, 2WR-	HO2S	, 2TWC (2	2), 2HO2S			FULL	*				
*		***************************************	*				Р	ARTIAL	ALL MODELS		5.7		
*	* *							TIAL WITH FINES	*				
		EV	APO	RATIVE &	REFUELING	(EVA	P/OR	VR) FAMIL	INFORMATIC	N			
EVA	P / ORV	R FAMILY	EVA	PORATIVE	STD CATE	STD CATEGORY			SSION STD E CLASS		SPE	CIAL FEATURES	
1	KTYXR01	90P32		L	EV 2	2 LDT4				HCT			
				ı	EMISSION CF	REDIT	INFO	DRMATION					
	EDIT FO	X FLEET AVE. OR EXTENDED RRANTY			EDIT FOR NO	ON-P	ZEV	NMOG CREDIT FOR DOR		R	OPTIONAL EXH. STD FOR WORK TRUCKS		
		N			N				N .			N	
				NMOG	AND FLEET	AVE	RAGE	INFORMA	TION				
NMOG RAF	CH4 RAF	FTP NMOG/NMHC RATIO		IO/NMHC RATIO	NMOG+NOX FLEET S PC+LDT (0-3750 LV (g/mi)					0	D NMOG+NOX FLEET STD MDV (10,001-14,000 GVWR) (g/mi)		
*	*	1.04	0	0.018	0	. 072			0.083		*		

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.



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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 at El Monte, California on this ______ day of July 2018.

Annette Hebert, Chief

Emissions Compliance, Automotive Regulations and Science Division



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ATTACHMENT

EXHAUST AND EVAPORATIVE EMISSION STANDARDS AND CERTIFICATION LEVELS

EXHAUST EMISSION STANDARDS	AND CERTIFIC	CATION 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 (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	GASOLINE - CA PHASE 2	0.0175	0.040	0.23	1.7	0.012	0.05	*	8	*	*	
FTP@UL	GASOLINE - CA PHASE 2	0.0214	0.055	0.28	2.1	0.012	0.07	*	11	*	0.01	
50°F @4K	*	*	*	*	*	*	*	*	*			

	FUEL TYPE	NOx (g/mi)	CO (g/mi)		
	FOEL TIPE	CERT	STD	CERT	STD	
HWFET @ 50K	GASOLINE - CA PHASE 2	0.006	0.07	,		
HWFET @ UL	GASOLINE - CA PHASE 2	0.006	0.09			
20°F @ 50K	GASOLINE-COLD CO LOW OCTANE			0.80	12.5	

SFTP EXHAUST EMISSION STANDARDS AND CERTIFICATION LEVELS

					SC0:	3	COMPOSITE			
	FUEL TYPE	٠	NMHC+NOx (g/mi)	CO (g/mi)	PM (mg/mi)	NMHC+NOx (g/mi)	CO (g/mi)	NMOG+NOx (g/mi)	CO (g/mi)	PM (mg/mi)
@ 4K	GASOLINE - CA PHASE 2		0.024	0.21		0.014	0.04			
		STD	0.60	11.8		0.44	4.0			
		CERT	*	*	*	*	*	0.0278	*	*
@ UL	GASOLINE - CA PHASE 2	STD	*	*	*	*	*	0.090	*	*
		BIN						0.100		

WHOLE VEHICLE EVAPORATIVE EMISSION STANDARDS AND CERTIFICATION LEVELS

			WHOLE \						
EVAPORATIVE FAMILY	FUEL TYPE	3DHS (g/test) @ UL			2DHS (g/test) @ UL			RL (g/mi) @ UL	
		CERT	STD	FEL	CERT	STD	FEL	CERT	STD
KTYXR0190P32	GASOLINE - TIER 2 UNLEADED	0.362	0.90	*	0.357	1.15	* *	0.004	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			
	FUEL TYPE	CERT	STD		CERT	STD	CERT	STD	CERT	STD		
KTYXR0190P32	GASOLINE - TIER 2 UNLEADED	0.033	0.20	*	*	*	*	*	*	*		



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EFFECTIVE LEAK DIAMETER STANDARD AND CERTIFICATION LEVEL (INCHES)								
EVAPORATIVE FAMILY	LEAK FAMILY	CERT	STD					
*	. *	*	*					

: 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: ULEY: 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; 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; 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

	2019 MODEL YEAR: VEHICLE MODELS INFORMATION											
MAKE	MODEL	VEH CLASS	ENGINE (L)	TRANS TYPE	EVAPORATIVE FAMILY	EXH ECS	OBD					
LEXUS	LX 570	LDT4	5.7	SA8	KTYXR0190P32	1	P					
TOYOTA	LAND CRUISER WAGON 4WD	LDT4	5.7	SA8	KTYXR0190P32	1	P					