

### TOYOTA MOTOR CORPORATION

Executive Order: A-014-1026

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 GROUP INFORMATION													
MOD	TEST COOLID			VEHICLE CLASS(ES)			FUEL CATEGORY			FUEL TYPE			
201	9 KT	YXV02.0N4C	2.0N4C PC				HYBRID ELECTRIC VEHICLE				GASOLINE		
USEFUL LIFE (miles)				VEHICLE EMISSION CATEGOR			ORY	Y INTERIM / INTE			ERMEDIATE IN-USE STD		
EXH/ORVR EVAP				FTP S			SF	TP FTP			SFTP		
150000 150000				LEV3	ULEV50	LEV	3 CC	MPOSITE	NMOG+NOX A	ND	PM	PM	
SPECIAL FEATURES & EXHAUST EMISSION CONTROL SYSTEMS					L	OBD STATUS				ENGINE DISPLACEMENT (L)			
1	DFI, SFI, EGR, EGRC, WR-HO2S(2), TWC(2)					,		FULL ALL MODELS					
*	*						Р	PARTIAL *			2.0		
*	+							ARTIAL WITH FINES					
EVAPORATIVE & REFUELING (EVAP/ORVR) FAMILY INFORMATION													
EV	EVAP / ORVR FAMILY EVAPORATIVE STD CATEGOR						,	EVAP EMISSION STD VEHICLE CLASS			SPECIAL FEATURES		
KTYXR0130J72				LEV 3 OPTION2				PC			HCT		
				ı	EMISSION CI	REDIT	INFO	RMATION					
	REDIT FO	X FLEET AVE. OR EXTENDED RRANTY		MOG CREDIT FOR NON-PZEV ZERO-EVAP			NMOG CREDIT FOR DOR			OPTIONAL EXH. STD FOR WORK TRUCKS			
N				N			И			И			
NMOG AND FLEET AVERAGE INFORMATION													
NMOG RAF	CH4 RAF	FTP NMOG/NMHC RATIO		O/NMHC	NMOG+NO PC+LDT (6			V) LDT	i+NOX FLEET STD (3751 LVW-8500 R) + MDPV (g/mi)		NMOG+NOX FLEET STD MDV (10,001-14,000 GVWR) (g/mi)		
*	*	1.10	(	0.008	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. (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.)



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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 September 2018.

Annette Hebert, Chief

Emissions Compliance, Automotive Regulations and Science Division



GASOLINE-

LEV3 E10

KTYXR0130J72

0.001

0.20

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### **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 CO NOx нсно **PM** (g/mi) (g/mi) (g/mi) (mg/mi) (g/mi) **CERT** STD CERT STD **CERT** STD **CERT** STD **CERT** STD \* \* \* \* \* FTP@50K \* GASOLINE-0.0168 0.050 0.09 1.7 4 0.0007 0.003 FTP@UL TIER3 E10 \* \* \* \* \* 50°F @4K NMOG+NOx (g/mi) CO (g/mi) **FUEL TYPE CERT** STD **CERT** STD HWFET @ 50K HWFET@UL GASOLINE-TIER3 E10 0.0045 0.050 COLD CO E10 REGULAR GASOLINE (TIER3) 0.43 10.0 20°F @ 50K SFTP EXHAUST EMISSION STANDARDS AND CERTIFICATION LEVELS COMPOSITE **US06 FUEL TYPE** NMOG+NOx PM NMOG+NOx CO NMOG+NOx CO PM CO (g/mi) (g/mi) (mg/mi) (g/mi) (g/mi) (g/mi) (g/mi) (mg/mi) **CERT** @ 4K \* + STD \* \* \* \* \* 0.0202 0.14 \* CERT 0.3 GASOLINE-STD . \* 6 + 0.090 4.2 + @ UL TIER3 E10 0.050 BIN WHOLE VEHICLE EVAPORATIVE EMISSION STANDARDS AND CERTIFICATION LEVELS WHOLE VEHICLE EVAPORATIVE TESTING RL (g/mi) @ UL **EVAPORATIVE FUEL TYPE** 3DHS (g/test) @ UL 2DHS (g/test) @ UL **FAMILY CERT** STD **CERT** STD FEL **CERT** STD FEL GASOLINE-0.1170 0.300 0.000 0.05 KTYXR0130J72 0.1308 0.300 LEV3 E10 ORVR / FUEL ONLY / CANISTER BLEED EVAPORATIVE EMISSION STANDARDS AND CERTIFICATION LEVELS **FUEL ONLY EVAP & CANISTER BLEED** 2DHS RIG TEST ORVR (g/gallon) @ UL 3DHS RIG TEST **BLEED CANISTER EVAPORATIVE** (g/test) @ UL (g/test) @ UL TEST (g/test) @ 4K **FAMILY FUEL TYPE CERT FUEL TYPE CERT** STD **CERT** STD **CERT** STD STD



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EFFECTIVE LEAK DIAMETER STANDARD AND CERTIFICATION LEVEL (INCHES)								
EVAPORATIVE FAMILY	LEAK FAMILY	CERT	STD					
KTYXR0130J72	KTYXR0130J72-001	*	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; GWR: 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; 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	OBD
LEXUS	UX 250H	PC	2.0	SCV6	KTYXR0130J72	1	F
LEXUS	UX 250H AWD	PC	2.0	SCV6	KTYXR0130J72	1	F