California Environmental Protection Agency

⊘ Air Resources Board

TOYOTA MOTOR CORPORATION

Executive Order: A-014-0923

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

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Pursuant to the authority vested in the 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: 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	INF	ORMATI	ON					
MODEL YEAR	- 1 179-	EST G	ROUP	VEHICLE CLASS(ES)				FUEL CATEGORY				FU	EL TYPE		
2017	нт	YXV01	L.8P3U			PC		HYBRID ELECTRIC VEHICLE				GASOLINE			
U	JSEFUL	LIFE	(miles)		\	EHICLE EMISS	ION	CA	TEGOR	Y	IN	ITERIM / IN	ΓER	MEDIAT	E IN-USE STD
EXH/	ORVR		EVAP			FTP			SFTP			FTP			SFTP
150	0000		150000		LE	V3 SULEV30	LE	V 3	3 СОМРО	SITE		NMOG+NO2	ζ		NMOG+NOX
SPEC	CIAL FE	ATUR		HAUS'		SION CONTRO	L			OBD S	TAT	JS	E	NGINE	DISPLACEMENT (L)
1	SFI,	EGR	, EGRC,	WR-H	02S,	TWC(2), HO2S		1	FUL	L		*			
*				*					PART	IAL	AL	L MODELS	1		1.8
*	* *									RTIAL WITH *					
			EV	APOR	RATIVE	& REFUELING	(EV	ΆP	P/ORVR) I	FAMILY	INF	ORMATION	l		
EVAP	P / ORV	R FAN	/IILY	EVAF	PORAT	IVE STD CATE	SOR	Υ		P EMI			S	SPECIAI	L FEATURES
н	TYXR01	05P12	2			LEV 2				F	C				нст
						EMISSION CF	RED	IT I	INFORMA	NOITA					
	A	LLOW	ANCE FO	R TES	ST GR	OUP				OG CREDIT FOR PZEV ZERO-EVAP				T FOR	OPTIONAL EXH. STD FOR WORK
BASE	LINE PZ	ZEV	AT	PZEV		TZEV	IN.	IOI	N-FZEV Z	ERO-E	VAF		JK		TRUCKS
* * *								N			1	1		N	
					NM	OG AND FLEET	AV	ER	AGE INF	ORMA	TION	l			
NMOG RAF	1 NMO(2/NMH() 1 P()+1 1)1 /()=3				0-37	3750 LVW)		NMOG+NOX FLEET ST LDT (3751 LVW-8500 GVWR) + MDPV (g/mi		1 LVW-8500					
*	*		1.10	0	.065	0	.08	6			0	.101			*

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.

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 NMOG+NOx and greenhouse gas Fleet Average (PC or LDT or MDPV) or "Vehicle Equivalent Credit" (MDV) compliance plan 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],

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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

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 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 **HCHO** PM CO NOx (g/mi) (g/mi) (g/mi) (mg/mi) (g/mi)

		CERT	STD	CERT	STD	CERT	STD	CERT	STD	CERT	STD
FTP@50K	*	*	*	*	*	*	*	*	*	*	*
FTP@UL	GASOLINE- LEV3 E10	0.0087	0.030	0.12	1.0	*	*	*	4	*	0.01
50°F @4K	*	*	*	*	*	*	*	*	*		ig great
			CUEL TVD	E		NN	OG+NOx	(g/mi)		CO (g/mi)
			FUEL TYP	_		CE	RT	STD	CEF	RT	STD

	VFET@UL GASOLINE-LEV3 E10 0.0061 0.030	00(g/mi)		
	FOEL TIPE	CERT	STD	CERT	STD
HWFET @ 50K	*	*	*		
HWFET @ UL	GASOLINE-LEV3 E10	0.0061	0.030		
20°F @ 50K	COLD CO E10 REGULAR GASOLINE (TIER 3)			0.61	10.0

SFTP EXHAUST EMISSION STANDARDS AND CERTIFICATION LEVELS

		1.		US06		SC03	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	*	CERT	*	*		*	*				
		STD	*	*	1	*	*				
		CERT	*	*	*	*	*	0.0088	0.19	*	
@ UL	GASOLINE- LEV3 E10	STD	*	*	*	*	*	0.103	4.2	*	
		BIN		-3-1-a				0.040		1000	

WHOLE VEHICLE EVAPORATIVE EMISSION STANDARDS AND CERTIFICATION LEVELS

EVAPORATIVE FAMILY			WHOLE						
	FUEL TYPE	3DHS	S (g/test)	@ UL	2D	HS (g/test) @	RL (g/mi) @ UL		
		CERT	STD	FEL	CERT	STD	FEL	CERT	STD
HTYXR0105P12	GASOLINE - TIER 2 UNLEADED	0.216	0.50	*	*	0.65	*	0.003	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			
HTYXR0105P12	GASOLINE - TIER 2 UNLEADED	0.017	0.20	*	*	*	*	*	*	*			

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t: 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; PZEV: partial ZEV; AT PZEV: advanced technology PZEV; 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; 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

2017 MODEL YEAR: VEHICLE MODELS INFORMATION													
MAKE	MODEL	VEH CLASS	ENGINE (L)	TRANS TYPE	EVAPORATIVE FAMILY	EXH ECS	OBD	PZEV TYPE					
LEXUS	CT 200H	PC	1.8	CV1	HTYXR0105P12	1	P	*					
TOYOTA	PRIUS V	PC	1.8	CV1	HTYXR0105P12	1	P	*					