California Environmental Protection Agency

OB Air Resources Board

TOYOTA MOTOR CORPORATION

Executive Order: A-014-0925

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 I	NFO	ORMATIO	N					
MODE	_	EST G	ROUP	VEHICLE CLASS(ES)					FU	FUEL CATEGORY			FUEL TYPE		EL TYPE
2017	нт	YXV02	2.5B6D	PC					DEDICATED SINGLE FUEL VEHICLE			GASOLINE			
-	USEFUL	LIFE	(miles)		V	EHICLE EMISS	ON	CA	TEGORY	T	IN	TERIM / INT	ERME	DIAT	TE IN-USE STD
EXH	I/ORVR		EVAP			FTP			SFTP			FTP			SFTP
12	0000		150000		L	EV2 ULEV			2 SFTP			*			*
SPE	CIAL FE	ATUR		HAUST TEMS	EMIS	SION CONTRO	L		OE	BD S	ΓΑΤΙ	JS	ENG	SINE	DISPLACEMEN' (L)
1		SFI	, WR-HO	2S, TW	₹C (2)	, HO2S			FULL			*			
*				*					PARTIA	L	AL	L MODELS	2.5		
*	* *							Р	ARTIAL W	1 * !!					
			EV	APOR	ATIVE	& REFUELING	(EV	AP/	ORVR) FA	MILY	INF	ORMATION			
EVA	P / ORV	RFAN	MILY	EVAPO	ORAT	IVE STD CATE	SOR	RY EVAP EMISSION STD VEHICLE CLASS				SPE	ECIAI	FEATURES	
H	HTYXR01	20A42	2			LEV 2		PC						HCT	
H	HTYXR01	15A12	2			LEV 2			PC HCT			HCT			
						EMISSION CF	REDI	T IN	NFORMAT	ION					
	Α	LLOW	ANCE FO	R TES	T GR	OUP			IOG CRED			NMOG CR		FOR	OPTIONAL EXH STD FOR WORI
BASE	ELINE P	ZEV	АТ	PZEV		TZEV	N	ON-	-PZEV ZEF	RO-E	VAP	DC)R		TRUCKS
* * *								N 1			1	i .		И	
					NM	OG AND FLEET	AVE	ERA	AGE INFO	RMA	TION				
					PC+LDT (_VW)	NMOG+NOX FLEET ST LDT (3751 LVW-8500 GVWR) + MDPV (g/mi		LVW-8500		NMOG+NOX FLEET STD MDV (10001-14000 GVWR) (g/mi)		
*	*	:	1.04	0.	018	0	.086	5			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.

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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:

Evaporative family HTYXR0120A42 is certified pursuant to 13 CCR Section 1976(b)(1)(G)3 and deemed to comply with the requirements of 13 CCR Section 1976(b)(1)(G)1 ["LEV III evaporative requirements"].

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 25 day of May 2016.

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

		1	NMOG (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	0.0170	0.040	0.17	1.7	0.018	0.05	*	8	*	*			
FTP@UL	GASOLINE - CA PHASE 2	0.0212	0.055	.0.23	2.1	0.020	0.07	*	11	*	0.01			
50°F @4K	*	*	*	*	*	*	*	*	*					

	FUEL TYPE	NOx	(g/mi)	CO (g/mi)		
Confession (Control	FUEL TYPE	CERT	STD	CERT	STD	
HWFET @ 50K	GASOLINE - CA PHASE 2	0.005	0.07			
HWFET @ UL	GASOLINE - CA PHASE 2	0.007	0.09	tota silenta La calenda a		
20°F @ 50K	GASOLINE-COLD CO LOW OCTANE			1.03	10.0	

SFTP EXHAUST EMISSION STANDARDS AND CERTIFICATION LEVELS

				US06		SC0	3	COM	IPOSITE	
	FUEL TYPE		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	CERT	0.022	0.28		0.025	0.06			
		STD	0.14	8.0		0.20	2.7			
		CERT	. *	*	*	*	*	0.0366	*	*
@ 111	GASOLINE - CA PHASE 2	STD	*	*	*	*	*	0.103	*	*
		BIN						0.100		

WHOLE VEHICLE EVAPORATIVE EMISSION STANDARDS AND CERTIFICATION LEVELS

			WHOLE						
EVAPORATIVE FAMILY	FUEL TYPE	3DHS	S (g/test) (@ UL	2DI	HS (g/test) @	RL (g/mi) @ UL		
		CERT	STD	FEL	CERT	STD	FEL	CERT	STD
HTYXR0115A12	GASOLINE - TIER 2 UNLEADED	0.158	0.50	*	*	0.65	*	0.005	0.05
HTYXR0120A42	GASOLINE - CA PHASE 2	0.109	0.35	*	*	0.35	*	0.004	0.05

ORVE / FUEL ONLY / CANISTER BI FED EVAPORATIVE EMISSION STANDARDS AND CERTIFICATION LEVELS

				FUEL ONLY EVAP & CANISTER BLEED								
EVAPORATIVE	ORVR (g/gallon) @ UL			FUEL TYPE		IG TEST	2DHS RIG TEST (g/test) @ UL		BLEED CANISTER TEST (g/test) @ 4K			
	FUEL TYPE	CERT	STD		CERT	STD	CERT	STD	CERT	STD		
HTYXR0115A12	GASOLINE - TIER 2 UNLEADED	0.040	0.20	*	*	*	*	*	*	*		
HTYXR0120A42	GASOLINE - TIER 2 UNLEADED	0.004	0.20	GASOLINE - CA PHASE 2	0.01	0.0	*	0.0	*	*		

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
TOYOTA	CAMRY	PC	2.5	SA6	HTYXR0115A12	1	P	*
TOYOTA	CAMRY	PC	2.5	SA6	HTYXR0120A42	1	P	*