### California Environmental Protection Agency

# **OB** Air Resources Board

TOYOTA MOTOR CORPORATION

Executive Order: A-014-0900

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 GROUP INFORMATION													
MODE	1	TEST COOLD			VEHICLE CLASS(ES)			FUEL C	ATEGORY	FUEL TYPE			
201	L6 GTYXV02.5PC4					PC			ELECTRIC	GASOLINE			
USEFUL LIFE (miles)					VEHIC	CLE EMISS	ION CAT	EGORY	INTERIM / IN	TERMEDI	TERMEDIATE IN-USE STD		
EXI	EXH/ORVR EVAP				F	TP	5	FTP	FTP		SFTP		
1	150000 150000			0	LEV3 S	ULEV30	LEV 3	COMPOSITE PM		NMOG+NOX AND PM			
SPE	SPECIAL FEATURES & EXHAUST EMISSION CONTROL SYSTEMS							OBD S	TATUS	ENGIN	ENGINE DISPLACEMENT (L)		
1	TW	C(2),	WR-HO2S	, но2	S, EGR, E	GRC, SFI		FULL	ALL MODELS				
*				*				PARTIAL	*		2.5		
*	* PARTIAL WITH * FINES												
EVAPORATIVE & REFUELING (EVAP/ORVR) FAMILY INFORMATION													
EVA	EVAP / ORVR FAMILY EVAPORATIVE STD CATEGO							RY EVAP EMISSION STD VEHICLE CLASS			SPECIAL FEATURES		
	GTYXR0130A72				LEV 2			P	С		HCT		
					-EN	MISSION CE	REDIT IN	FORMATION					
ALLOWANCE FOR TEST GROUP  BASELINE PZEV TZEV						TZEV		OG CREDIT FO		REDIT FOR	OPTIONAL EXH. STD FOR WORK TRUCKS		
* SOME MODELS *						*		N I			И		
NMOG AND FLEET AVERAGE INFORMATION													
NMO	OG RAF CH4 RAF FTP NMOG/NMHC RATIO				HCHO/NM	HCHO/NMHC RATIO		OX FLEET STD (0-3750 LVW) (g/mi)	LDT	NMOG+NOX FLEET STD LDT (3751 LVW-8500 GVWR) + MDPV (g/mi)			
4	*	* 1.10 *					*	0.093			0.110		

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 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], 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 GTYXR0130A72 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 \_\_\_\_

Hebert, Chief

Emissions Compliance, Automotive Regulations and Science Division

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							Α	TTAC	НМ	ENT							
	EXH	AUS	T AND	EVAP	ORA	TIVE	EMIS	SSION	STAN	IDAR	DS AN	D CERT	IFIC.	ATION	LEVELS	3	
		EXH	IAUST E	MISSIC	N ST	ANDA	RDS A	ND CER	TIFICA	TION	LEVELS	(FTP, HW	/FET,	50°F, 20	°F)		
	FU	FUEL TYPE		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+NOx (g/mi)			CO (g/mi)			NOx (g/mi)			HCH(				
Market	1 L			CERT	S	TD	CERT	STI	)	CERT	STE	CER	T	STD	CERT	STD	
FTP@50	P@50K *			*	,	*	*	*		*	*	*		*	*	*	
FTP@U	GASOLINE- LEV3 E10		1 (	.0145	0.0	030	0.05	1.0		*	*	*		4	*	0.003	
50°F @4	4K	*		*	1	*	*	*		*	*	*		*			
				FUEL TYPE						NMOG+NO		Ox (g/mi)	x (g/mi)		CO (g/mi)		
					POEL TIPE				CERT		STD	STD		CERT			
HWFET	T @ 50K					*					*	*					
HWFET @ UL				GASOLINE-LEV3 E10						0.0055 0.030		)					
20°F (	@ 50K		GAS	OLINE-	-COLD	co :	LOW OC	CTANE						0.70	)	10.0	
			S	TP EX	HAUS	TEM	ISSION	STAND	ARDS	AND	CERTIFIC	CATION L	EVEL	S			
				US06						SC03			COMPOSITE				
	FUEL '			NMOG+NOx (g/mi)		X	CO (g/mi) (		PM (mg/mi)		NMOG+NOx (g/mi)		NMOG+NO: (g/mi)		(g/mi)	PM (mg/mi)	
@ 4K		* CE			*		*	Vall		*		*					
W 411					*		*			*		*					
	CACOL	ASOLINE- LEV3 E10 BII			*		*	,	•		*	*	0.0107		0.05	*	
@ UL					*		*	1	0	-	*	*	-	0.110	4.2	*	
													0.030			i jaraja	
		W	HOLE VI	HICLE	EVAF							CERTIFIC	ATIO	N LEVEL	.\$		
EVADO	ODATIV	-	V			WH	IOLE V	EHICLE	EVAP	URAT	IVE TES	IING		PI	_ (g/mi) @		
FAMILY			FUEL TYPE		3DHS (g/test) @ UL				2DHS (g/test)								
							TD	FEL	CEI	RT STD		FEI	-	CER	Т	STD	
GTYXR0130A72		2 G.	ASOLINI PHASE	ASE 2 0.115		0	. 35	*	*		0.35	*	*		0.002		
0	RVR / I	UEL	ONLY /	CANIST	ER B	LEED	EVAP	ORATIVE	EMIS	SION	STANDA	ARDS AND	CEF	RTIFICAT	ION LEV	ELS	
EVAPORATIVE FAMILY										UEL ONLY EVAP							
		E ORVR (g		(g/gallon) @ UL		JL	FUEL TYPE		3DHS RI (g/test)				2DHS RIG (g/test) @		LEED CANISTER EST (g/test) @ 4K		
		_	JEL TYP		RT S	STD			CE	RT	STD	CERT		STD	CERT	STD	
GTYXR0130A72		2	SOLINE TIER 2 NLEADE	0.0	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: .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; 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 sparkignited 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

2016 MODEL YEAR: VEHICLE MODELS INFORMATION											
MAKE	MODEL	VEH CLASS	ENGINE (L)	TRANS TYPE	EVAPORATIVE FAMILY	EXH	OBD	PZEV TYPE			
LEXUS	ES 300H	PC	2.5	SCV6	GTYXR0130A72	1	F	*			
TOYOTA	CAMRY HYBRID	PC	2.5	CV1	GTYXR0130A72	1	F	AT PZEV (TYPE E)			
TOYOTA	CAMRY HYBRID	PC	2.5	CV1	GTYXR0130A72	1	F	AT PZEV (TYPE			