California Environmental Protection Agency

OB Air Resources Board

TOYOTA MOTOR CORPORATION

Executive Order: A-014-0887

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 GROU	P INFOR	MATION						
MODEL YEAR						FUEL CATEGORY				FUEL TYPE			
2016	016 GTYXV01.8BEC PC					DEDICATED SINGLE FUEL VEHICLE			FUEL	GASOLINE			
US	EFUL LIF	E (mil	es)	VEHI	CLE EMISSIO	N CATE	GORY	INTE	RIM / INT	ERMEDIA	TE IN-USE STD		
EXH/O	EXH/ORVR		VAP	F	TP	SF	TP		FTP		SFTP		
1200	00	15	0000	LEV2	ULEV		DARD						
SPECI	AL FEAT	URES	& EXHAUS		N CONTROL		OBD ST	ratus .		ENGINE	DISPLACEMENT (L)		
1		TWC (2), WR-HO2	S,HO2S,SI	?I		FULL	ALL M	ODELS				
*	* *,						PARTIAL	,	* 1.8				
*	*						RTIAL WITH	н .					
			EVAPO	RATIVE & F	REFUELING (I	EVAP/OF	RVR) FAMILY	INFOR	MATION				
EVAP	ORVR F	AMILY	EVA	PORATIVE	STD CATEGO	DRY	EVAP EMIS		-	SPECIA	L FEATURES		
GT	XR0115	P12		LE	V 2		PC				HCT		
-				E	MISSION CRE	DIT INF	ORMATION						
	ALL	OWAN	CE FOR TE	ST GROUP			NMOG CREDIT FOR NMOG CREDIT FOR				OPTIONAL EXH.		
BASEL	NE PZE	/	AT PZE	,	TZEV	NON-P	ZEV ZERO-E	VAP	DC	R	TRUCKS		
* * *						N		N	1	N			
				NMOG	AND FLEET	VERAG	E INFORMA	TION					
NMOG R	AF CH4	RAF	FTP NMOG/NMHO		NMHC HCHO/NMHC RATIO PC+LDT (0-375		RATIO PC+LDT					LDT (3	NOX FLEET STD 751 LVW-8500 + MDPV (g/mi)
*		*	1.	04	.0.01	18		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).

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 22 ud day of May 2015.

Michael A. Reffrat

Emissions Compliance, Automotive Regulations and Science Division

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ATTACHMENT

EXHAL	JST AND EVAPORATIVE EMISSION STANDARDS AND CERTIFICATION LEVELS
E	XHAUST 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: cart monoxide; NOx: oxides of nitrogen; HCHO: formaldehyde; PM; particulate matter; RAF; reactivity

CILEI 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

		NM (g/i		C (g/r		NO (g/i		HC (mg		P (g/	M mi)
100		CERT	STD	CERT	STD	CERT	STD	CERT	STD	CERT	STD
FTP@50K	GASOLINE - CA PHASE 2	0.0194	0.040	0.24	1.7	0.017	0.05	*	8	*	. *
FTP@UL	GASOLINE - CA PHASE 2	0.0212	0.055	0.27	2.1	0.022	0.07	*	11	*	0.01
50°F @4K	*	*	*	*	*		*	*	*		1

1	FUEL TYPE	NOx	(g/mi)	CO (g/mi)		
	FUEL TYPE	CERT	STD	CERT	STD	
HWFET @ 50K	GASOLINE - CA PHASE 2	0.007	0.07		*4	
HWFET @ UL	GASOLINE - CA PHASE 2	0.012	0.09			
20°F @ 50K	GASOLINE-COLD CO LOW OCTANE		C	0.94	10.0	

SFTP EXHAUST EMISSION STANDARDS AND CERTIFICATION LEVELS

		STATE OF		US06		SC03	3	COMPOSITE			
100	FUEL TYPE		NMHC+NOx (g/mi)	CO (g/mi)	PM (mg/mi)	NMHC+NOx (g/mi)	CO (g/mi)	NMHC+NOx (g/mi)	CO (g/mi)	PM (mg/mi)	
0.11/	GASOLINE -	CERT	0.014	0.25		0.017	0.01	-		*1	
@ 4K	CA PHASE 2	STD	0.14	8.0		0.20	2.7		1,	15 81	
		CERT	*	*	*	*	*	*	*	*	
@ UL	*	* STD *		*	*	* * *		*	*	*	
		BIN	-							1,200	

WHOLE VEHICLE EVAPORATIVE EMISSION STANDARDS AND CERTIFICATION LEVELS

EVAPORATIVE FAMILY			WHOLE						
	FUEL TYPE	3DHS (g/test) @ UL			2D	HS (g/test) (RL (g/mi) @ UL		
		CERT	STD	FEL	CERT	STD	FEL	CERT	STD
GTYXR0115P12	GASOLINE - TIER 2 UNLEADED	0.263	0.50		0.246	0.65	*	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			
GTYXR0115P12	GASOLINE - TIER 2 UNLEADED	0.014	0.20	*	*	*	*	*		*			

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: 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 ECS	OBD	PZEV TYPE					
Ì	TOYOTA	COROLLA	PC	1.8	A4,CV1	GTYXR0115P12	1	F	*					
Ì	TOYOTA	COROLLA	PC	1.8	M6	GTYXR0115P12	1	F	*					
I	TOYOTA	COROLLA	PC	1.8	SCV7	GTYXR0115P12	1	F	*					