

TOYOTA MOTOR CORPORATION

Executive Order: A-014-0998

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 GRO	IID II	IEO DI	MATION					
			т—		TEST GRO		T			_			
	TES	T GROUP		VEHICLE CLASS(ES)			FUEL CATEGORY			FUEL TYPE			
9 F	KTYX	CV02.0K6B		PC				EDICATED SINGLE FUEL VEHICLE			GASOLINE		
USEFUL LIFE (miles) VEHICLE EMIS						ION C	ATEC	ORY	INTERIM / IN	TER	ERMEDIATE IN-USE STD		
H/ORV	R	EVAP		FTP SF			TP FTP			SFTP			
50000		150000)	LEV3	ULEV125 LEV 3 COMPO			MPOSITE	PM		PM		
SPECIAL FEATURES & EXHAUST EMISSION CONTROL SYSTEMS								OBD S	TATUS	EI	ENGINE DISPLACEMENT (L)		
1 SFI, WR-HO2S, TWC(2), HO2S								FULL	*				
* *							Р	ARTIAL	ALL MODELS	2.0			
* *								RTIAL WITH *					
EVAPORATIVE & REFUELING (EVAP/ORVR) FAMILY INFORMATION													
EVAP / ORVR FAMILY EVAPORATIVE STD CATEGOR							,	EVAP EMISSION STD VEHICLE CLASS			SPECIAL FEATURES		
KTYXR0130P72 LEV 3 OPT					OPTION2		PC			HCT			
				E	MISSION CI	REDIT	r INFO	RMATION					
NMOG+NOX FLEET AVE. CREDIT FOR EXTENDED WARRANTY NMOG CREDIT FOR NON- ZERO-EVAP							ZEV	NMOG CREDIT FOR DOR			OPTIONAL EXH. STD FOR WORK TRUCKS		
N N									N		N		
NMOG AND FLEET AVERAGE INFORMATION													
MOG CH4 RAF NMOG/NMHC RATIO			н	CHO/NMHC RATIO	PC+LDT ((3751 LVW-850	0	MOG+NOX FLEET STD MDV (10,001-14,000 GVWR) (g/mi)		
*		1.10	Τ	0.016	0	.072			0.083		*		
	USEF H/ORV 50000 ECIAL AP / OI KTYXR MOG+P REDIT W	USEFUL L H/ORVR 50000 ECIAL FEA AP / ORVR KTYXR0130 MOG+NOX REDIT FOR WARR	R TEST GROUP 9 KTYXV02.0K6B USEFUL LIFE (miles) H/ORVR EVAP 50000 150000 ECIAL FEATURES & EX SYS SFI, WR-HO EVAP AP / ORVR FAMILY KTYXR0130P72 MOG+NOX FLEET AVE. REDIT FOR EXTENDED WARRANTY N G CH4 RAF RAF RAF NMOG/NMHC RATIO	R TEST GROUP 9 KTYXV02.0K6B USEFUL LIFE (miles) H/ORVR EVAP 50000 150000 ECIAL FEATURES & EXHAU SYSTEM SFI, WR-H02S, EVAP AP / ORVR FAMILY EV KTYXR0130P72 MOG+NOX FLEET AVE. REDIT FOR EXTENDED WARRANTY N G CH4 RAF NMOG/NMHC RATIO	R TEST GROUP VEHICLE 9 KTYXV02.0K6B USEFUL LIFE (miles) VEH H/ORVR EVAP 50000 150000 LEV3 ECIAL FEATURES & EXHAUST EMISSIC SYSTEMS SFI, WR-HO2S, TWC (2), II * EVAPORATIVE & AP / ORVR FAMILY EVAPORATIVE KTYXR0130P72 LEV 3 MOG+NOX FLEET AVE. REDIT FOR EXTENDED WARRANTY N NMOG CH4 RAF NMOG/NMHC RATIO HCHO/NMHC RATIO	R TEST GROUP VEHICLE CLASS(E 9 KTYXV02.0K6B PC USEFUL LIFE (miles) VEHICLE EMISS H/ORVR EVAP FTP 50000 150000 LEV3 ULEV125 ECIAL FEATURES & EXHAUST EMISSION CONTRO SYSTEMS SFI, WR-H02S, TWC (2), H02S * EVAPORATIVE & REFUELING AP / ORVR FAMILY EVAPORATIVE STD CATE KTYXR0130P72 LEV 3 OPTION2 EMISSION COMMOG+NOX FLEET AVE. REDIT FOR EXTENDED WARRANTY N NMOG CREDIT FOR N ZERO-EVAP NMOG AND FLEET CH4 NMOG/NMHC RATIO NMOG+NO PC+LDT (R TEST GROUP VEHICLE CLASS(ES) 9 KTYXV02.0K6B PC USEFUL LIFE (miles) VEHICLE EMISSION COMPONING PRODUCTION OF THE PROD	R TEST GROUP VEHICLE CLASS(ES) 9 KTYXV02.0K6B PC USEFUL LIFE (miles) VEHICLE EMISSION CATEO H/ORVR EVAP FTP SF 50000 150000 LEV3 ULEV125 LEV 3 CO ECIAL FEATURES & EXHAUST EMISSION CONTROL SYSTEMS SFI, WR-H02S, TWC (2), H02S * P A* EVAPORATIVE & REFUELING (EVAP/OR AP / ORVR FAMILY EVAPORATIVE STD CATEGORY KTYXR0130P72 LEV 3 OPTION2 EMISSION CREDIT INFO MOG+NOX FLEET AVE. REDIT FOR EXTENDED WARRANTY N NMOG CREDIT FOR NON-PZEV ZERO-EVAP NMOG AND FLEET AVERAGE CH4 RAF NMOG/NMHC RATIO NMOG+NOX FLEET S PC+LDT (0-3750 LVW (g/mi)	R TEST GROUP VEHICLE CLASS(ES) FUEL CLASS(ES) 9 KTYXV02.0K6B PC DEDICATED VEHICLE EMISSION CATEGORY H/ORVR EVAP FTP SFTP 50000 150000 LEV3 ULEV125 LEV 3 COMPOSITE ECIAL FEATURES & EXHAUST EMISSION CONTROL SYSTEMS SFI , WR-H02S , TWC (2) , H02S FULL PARTIAL PARTIAL WITH FINES EVAPORATIVE & REFUELING (EVAP/ORVR) FAMILY RTYXR0130P72 LEV 3 OPTION2 EVAP EMISSION CREDIT INFORMATION MOG+NOX FLEET AVE. REDIT FOR EXTENDED WARRANTY N NMOG CREDIT FOR NON-PZEV ZERO-EVAP NMOG AND FLEET AVERAGE INFORMA OF THE COMPOSITE OF THE COMPO	R TEST GROUP VEHICLE CLASS(ES) FUEL CATEGORY 9 KTYXV02.0K6B PC DEDICATED SINGLE FUEL VEHICLE USEFUL LIFE (miles) VEHICLE EMISSION CATEGORY FTP SFTP FTP 50000 150000 LEV3 ULEV125 LEV 3 COMPOSITE PM ECIAL FEATURES & EXHAUST EMISSION CONTROL SYSTEMS SFI, WR-H02S, TWC(2), H02S FULL * PARTIAL ALL MODELS * PARTIAL WITH FINES EVAPORATIVE & REFUELING (EVAP/ORVR) FAMILY INFORMATION AP / ORVR FAMILY EVAPORATIVE STD CATEGORY VEHICLE CLASS KTYXR0130P72 LEV 3 OPTION2 PC EMISSION CREDIT INFORMATION MOG+NOX FLEET AVE. REDIT FOR NON-PZEV ZERO-EVAP N NMOG CREDIT FOR NON-PZEV ZERO-EVAP NMOG AND FLEET AVERAGE INFORMATION NMOG CREDIT FOR NON-PZEV LDT (3751 LVW-850 GVWR) + MDPV (g/mi)	R TEST GROUP VEHICLE CLASS(ES) POEL CATEGORY STYXV02.0K6B PC DEDICATED SINGLE FUEL VEHICLE VEHICLE USEFUL LIFE (miles) H/ORVR EVAP FTP SFTP 50000 150000 LEV3 ULEV125 LEV 3 COMPOSITE PM ECIAL FEATURES & EXHAUST EMISSION CONTROL SYSTEMS SFI, WR-H02S, TWC(2), H02S FULL * PARTIAL ALL MODELS PARTIAL WITH FINES EVAPORATIVE & REFUELING (EVAP/ORVR) FAMILY INFORMATION AP / ORVR FAMILY EVAPORATIVE STD CATEGORY EVAP EMISSION STD VEHICLE CLASS STYXR0130P72 LEV 3 OPTION2 PC EMISSION CREDIT INFORMATION MOG-NOX FLEET AVE. REDIT FOR EXTENDED WARRANTY N NMOG CREDIT FOR NON-PZEV ZERO-EVAP NMOG CREDIT FOR NON-PZEV ZERO-EVAP NMOG AND FLEET AVERAGE INFORMATION NMOG-NOX FLEET STD NMOG/NMHC RATIO NMOG-NOX FLEET STD NMOG-NOX FLEET STD NMOG-NOX FLEET STD LDT (3751 LVW-8500 GVWR) + MDPV (g/mi)		

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 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

Annette Hebert, Chief

ZEmissions Compliance, Automotive Regulations and Science Division



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							A	TTAC	НМ	ENT								
	EXHAUST AND EVAPORATIVE EMISSION STANDARDS AND CERTIFICATION LEVELS																	
	EXHAUST EMISSION STANDARDS AND CERTIFICATION LEVELS (FTP, HWFET, 50°F, 20°F)																	
	F	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										ty ss;			
						MOG+NOx (g/mi)		CO (g/mi)		NOx (g/mi)		HCI (mg/			PM (g/mi			
				CI	ERT	STD	CERT	ST	D	CERT	STD	TD CERT		T STD		RT	STD	
FTP@5	0K	*			*	*	*	*		*	*	*		*	*		*	
	FTP@UL GASOLINE- TIER3 E10		101	0489	0.125	0.40	2.	1	*	*	*		4	0.0002		0.003		
50°F @	4K	*			*	*	*	*		*	*	*		*				
FUEL TYPE							PE			\vdash	NMOG+NOx (g/mi)			CO (g/m				
										-	CERT		STD		CERT		STD	
HWFET @ 50K *												*						
HWFET @ UL GASOLINE-TIER								0.0247			0.125							
20°F @ 50K COLD CO E10 REGULAR GASOLINE (TIER3) 1.27 10.0 SFTP EXHAUST EMISSION STANDARDS AND CERTIFICATION LEVELS											.0.0							
-				SFT	PEXHA	USTE		STAND	ARDS	AND CI	SC03		VEL		1400	CITE		
FUEL TYPE					NMOG+	NOv	US06	CO PM					NM	MOG+NOx		MPOSITE CO PM		
	1000011110			(g/mi)		(g/mi)					(g/mi)				/mi)	(mg/mi)		
@ 4K	4K * CE		ERT	RT *		*	*		,	•	*				****			
			3	STD	*	*				*		*						
	CE		ERT	T *		*	1	. 6	,	*		0.0430		0	.72	*		
@ UL		LINE		STD	D *		*	6		*		*	0.090		4	. 2	*	
				BIN										.080			<u> </u>	
		V	VHOI	LE VEH	ICLE E							ERTIFICA	ATIO	N LEVEL	.S			
	ORATI		FUE	EL TYP	PE 3DHS (g/test) @ UL 2DH								RL (g/mi) @ UL					
F.A	MILY		100		<u> </u>		STD			2DHS (g/test)		FEL		CERT		STD		
KTYXF	KTVXR0130P72 I		SOLINE ER3 E1	NE- 0 1996 0		0.300	*	*		0.300	*		0.005		0.05			
<u></u>	RVR	/ FUE				RIF	D EVAP	ORATIVI	EEMIS	SSIONS	TANDA	RDS AND	CE	RTIFICAT	ION	FVE	ıs	
ORVR / FUEL ONLY / CANISTER BLEED EVAPORATIVE EMISSION STANDARDS AND CERTIFICATION LEVE FUEL ONLY EVAP & CANISTER BLEED										4 -								
	EVAPORATIVE FAMILY		ORVR (g/gal			@ UL	EUE	FUEL TYPE			3DHS RIG TEST (g/test) @ UL		2DHS RIG 1 (g/test) @		EST BLEE		O CANISTER (g/test) @ 4K	
		-	FUEL	_ TYPE	CERT			_		RT STD		CERT			CER		STD	
KTYXE	0130E	277		LINE- R3 E10	0.003	0.2	0 1	LINE- 3 E10		*	*	*		*	0.0121 0.0		0.020	



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EFFECTIVE LEAK DIAMETER STANDARD AND CERTIFICATION LEVEL (INCHES)							
EVAPORATIVE FAMILY	LEAK FAMILY	CERT	STD				
KTYXR0130P72	KTYXR0130P72-001		0.02				

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; 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; ŽEV: 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
TOYOTA	C-HR	PC	2.0	SCV7	KTYXR0130P72	1	P