

TOYOTA MOTOR CORPORATION

EXECUTIVE ORDER A-014-0422 New Passenger Cars, Light-Duty Trucks and Medium-Duty Vehicles

Pursuant to the authority vested in the Air Resources Board by Health and Safety Code (HSC), Div. 26, Part 5, Chap. 2; and pursuant to the authority vested in the undersigned by HSC Sections 39515 and 39516 and Executive Order G-45-9;

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.

MODE YEAR		TEST GROUP		VEHICLE TYPE	EXHAUST STANDARD		FUEL TYPE						
2002	2TYX	T02.4FFP	37	51-5750 Pounds Loaded Vehicle Weight Light-Duty Truck	Low Emissi (LE		TWC = 3-way catalytic converter WUTWC = warm-up TWC ADSTWC = adsorber TWC O2S = oxygen senso						
No.	EVAPOR/ FAMILY (No.	SPECIAL FEATURES & EMISSION CONTROL SYSTEMS (ECS	* = not applicable	ADSTWC = a							
1	2TYXR015	50AK1	1	2TWC, 2HAFS, 2HO2S, SFI, O	3D (P)	HO2S = heated O2S AFS = air / fuel sensor (aka. universal O2S HAFS = heated AFS EGR = exhaust gas recirculation							
2	*		2	*		AIR = second	dary air injection PAIR = pulsed AIR ort fuel injection SFI = sequential MFI po/super charger CAC = charge air cooler						
3	•		3	*		TC/SC = turb							
4	•		4	*		OBD (F) / OBD (P) = on-board diagnostics; full / partial of (prefix) 2 = parallet (2) (suffix) = series							
EVAF No.	ECS No.	ENGINE SIZE (L)			SUBJECT TO								
1	1 2.4			Toyota: Highlander (2WD and 4WD)									
•	*	•			*								
				*									
	*	* *				•							

The exhaust and evaporative emission standards (STD) and certification emission levels (CERT) for the listed vehicles are as follows. Any debit in the manufacturer's compliance plan for "NMOG Fleet Average" (passenger cars and light-duty trucks) or "Vehicle Equivalent Credit" (medium-duty vehicles) shall be equalized as required. The 50° Fahrenheit standards and CERT levels are listed below or compliance has been met based on the manufacturer's submitted compliance plan in lieu of actual testing.

NMOG FLEET AVERAGE [g/mi]		NMOG [g/mi] @ RAF = 0.94		CH4 = methane NMOG = non-CH4 organic gases NMHC = non-CH4 hydrocarbons CO = carbon monoxide NOx = oxides of nitrogen HCHO = formaldehyde PM = particulate matter RAF = reactivity adjustment factor												
CERT	STD			CO [g/ml]			NOx [g/mi]		HCHO [mg/mi]		PM [g/mi]			Hwy NOx [g/mi]		
0.100	0,09	5	CERT	STD	CERT	STD	С	ERT	STD	CERT	STD	CERT	ST	TD	CERT	STD
	@	50K	0.051	0.100	1.3	4.4		0.2	0.4	0.2	18	*		•	0.1	0.5
K = 1000 miles	@ 1	@ 100K		0.130	2.2	5.5		0.4	0.5	0.3	23	•		•	0.3	0.7
	@ 50°F	, 4K	*	*	•	•		•	*	*	*			*	*	*
	[g/mi])°F, 50K		g = gram mg = milligram		NMHC+NOx [g/mi] (composite)		i] Ni	NMHC+NOx [g/mi] [US06]		CO [g/mi] [US06]		NMHC+NOx [g/mi] [SC03]		g/mi]	CO [g/mi] [SC03]	
CERT	STD			mi = mile		STD	С	ERT	STD	CERT	STD	CER	r s	TD	CERT	STD
4.4	12.5		@ 4K		*	*		•	*	*	•	*		*	*	
F = degree	Fahrenhe	it		@ 100K	•	*		*	*	•	•	*	+		•	
@	EVAPORATIVE FAMILY 1			EVAPORATIVE FAMILY 2 E			VAPORATIVE FAMILY 3			EVAPORATIVE FAMILY 4						
100K	3-D	2-D	RL	ORVR	3-D	2-D	RL	ORVR	3-D	2-D	RL	ORVR	3-D	2-D	RL	ORVR
CERT	0.4	0.5	0.01	0.01	•	•	*	•	•	•	*	*	•	*	٠,	•
STD	2.0	2.5	0.05	0.20	٠	•	*	•	*	•	*	*	•	•	*	•
2-D, 3-D [g/i	test) = 2-d:	ay, 3-d	lay diurnal a	ind hot-soal	[RL [g/mi] = runn	ing loss		ORVR [g/ga	illon of fue	dispense	d] = on-b	oard ref	ueling vapo	r recovery

BE IT FURTHER RESOLVED: That for the listed vehicle models, the manufacturer has attested to compliance with Title 13, California Code of Regulations, (13 CCR) Sections 1965 (labeling), 1968.1 or 1968.1(m)(6.2) (on-board diagnostic systems; full or partial compliance), 2035 et seq. (emission control warranty), 2235 (fuel tank fill pipes and openings), and "High-Altitude Requirements" and "Inspection and Maintenance Emission Standards" (California Exhaust Emission Standards and Test Procedures for 2001 and Subsequent Model Passenger Cars, Light-Duty Trucks, and Medium-Duty Vehicles).

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 3071 day of August 2001.

R. B. Summerfield, Chief Mobile Source Operations Division