State of California AIR RESOURCES BOARD

EXECUTIVE ORDER A-14-281 Relating to Certification of New Motor Vehicles

TOYOTA MOTOR CORPORATION

Pursuant to the authority vested in the Air Resources Board by the Health and Safety Code, Division 26, Part 5, Chapter 2; and

Pursuant to the authority vested in the undersigned by Health and Safety Code Sections 39515 and 39516 and Executive Order G-45-9;

IT IS ORDERED AND RESOLVED: That 1996 model-year Toyota Motor Corporation, exhaust emission control systems are certified as described below for passenger cars:

Fuel Type: Gasoline

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Engine Family: TTY1.8VJG1GK <u>Displacement</u>: 1.8 Liters (107.5 Cubic Inches) 1.6 Liters (96.8 Cubic Inches)

Exhaust Emission Control Systems and Special Features:

Sequential Multiport Fuel Injection Exhaust Gas Recirculation Oxygen Sensor Three Way Catalytic Converter Heated Oxygen Sensor

Vehicle models, transmissions, engine codes and evaporative emission control families are listed on attachments.

The certification exhaust emission standards for this engine family in grams per mile are:

<u>Miles</u>	Non-Methane	Carbon	Nitrogen	Carbon	
	<u>Hydrocarbons</u>	<u>Monoxide</u>	Oxides	<u>Monoxide (20⁰F)</u>	
50,000	0.25	3.4	0.4	10.0	
100,000	0.31	4.2	0.6	n/a	

The certification exhaust emission values for this engine family in grams per mile are:

<u>Miles</u>	Non-Methane	Carbon	Nitrogen	Carbon
	<u>Hydrocarbons</u>	<u>Monoxide</u>	<u>Oxides</u>	<u>Monoxide (20⁰F)</u>
50,000	0.15	1.5	0.2	6.0
100,000	0.16	1.8		n/a

BE IT FURTHER RESOLVED: That the listed vehicle models also comply with the "California Motor Vehicle Emission Control Label Specifications" for the aforementioned model year (Title 13, California Code of Regulations, Section 1965).

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BE IT FURTHER RESOLVED: That the vehicle manufacturer is certifying the listed vehicle models to the aforementioned exhaust emission standards based on its submitted plan to comply with the fleet average non-methane organic gas (NMOG) exhaust mass emission requirements as set forth in "California Exhaust Emission Standards and Test Procedures for 1988 and Subsequent Model Passenger Cars, Light-Duty Trucks, and Medium-Duty Vehicles".

BE IT FURTHER RESOLVED: That under the submitted NMOG fleet average compliance plan, if the manufacturer incurs a NMOG debit for the aforementioned model year based on the projected NMOG fleet average exceeding the value required by the above-referenced standards and test procedures, all incurred NMOG debits by the manufacturer shall be equalized as required by the standards and test procedures.

BE IT FURTHER RESOLVED: That the vehicle manufacturer is certifying the listed vehicle models to the 50,000-mile evaporative emission standards applicable to 1980 through 1994 model-year vehicles in the "California Evaporative Emission Standards and Test Procedures for 1978 and Subsequent Model Motor Vehicles", and the listed vehicle models comply with those standards.

BE IT FURTHER RESOLVED: That, based on the evaporative emission phase-in compliance schedule submitted by the vehicle manufacturer, the listed vehicle models shall not be subject to the running loss and useful life standards set forth in the "California Evaporative Emission Standards and Test Procedures for 1978 and Subsequent Model Motor Vehicles."

BE IT FURTHER RESOLVED: That the listed vehicle models also comply with the Board's "Specifications for Fill Pipes and Openings of Motor Vehicle Fuel Tanks" for the aforementioned model year (Title 13, California Code of Regulations, Section 2235).

BE IT FURTHER RESOLVED: That the listed vehicle models also comply with the Board's high-altitude requirements and highway emission standards, and with the California Inspection and Maintenance emission standards in place at the time of certification, as stipulated in "California Exhaust Emission Standards and Test Procedures for 1988 and Subsequent Model Passenger Cars, Light-Duty Trucks, and Medium-Duty Vehicles".

BE IT FURTHER RESOLVED: That the listed vehicle models also comply with the "Malfunction and Diagnostic System Requirements--1994 and Subsequent Model-Year Passenger Cars, Light-Duty Trucks, and Medium-Duty Vehicles and Engines" (Title 13, California Code of Regulations, Section 1968.1) for the aforementioned model year.

BE IT FURTHER RESOLVED: That for the listed vehicles, the manufacturer has submitted and the Executive Officer hereby approves the materials to demonstrate certification compliance with the Board's emission control system warranty provisions (Title 13, California Code of Regulations, Section 2035 et seq.).

Vehicles certified under this Executive Order must conform to all applicable California emission regulations.

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The Bureau of Automotive Repair will be notified by copy of this order and attachment.

Executed at El Monte, California this _____ day of July 1995.

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R. B. Summerfield,

Assistant Division Chief Mobile Source Division

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17.11.00

1996 MODEL-YEAR AIR RESOURCES BOARD SUPPLEMENTAL DATA SHEET PASSENGER CARS, LIGHT-DUTY TRUCKS AND MEDIUM-DUTY VEHICLES

M		Exh Eng	Fam: T	TY1.8VJO	GIGK. Evap H	Evap Fam: TTY1047DYMA0		
	Manufacturer: TOYOTA Exil Eng Fam: CA x 49S 50S AB965							
All Eng Codes in Eng Paint. Cri A LEV LEV ULEV ZEV ; US EPA Tier-1							A Tier-1	
Evan std: 50K x Useful Life with R/L In-Use Exh Std: Full In Use x Alt In Use								
Veh Class(es): PC x LDT1 LDT2 MDV1 MDV2 MDV3 MDV4 MDV5								
Single Cert	Std for Multi-Class Eng Fan	n: N	<u>Ϊ/Α</u>	(spec	ify: N/A, LDT1, ML	IVI, MDV2, MI	Diacal	
Fuel Type	s): Dedicated x Fle	x-Fuel	Du	al-Fuel	Bi-FuelC	Gasoline x	Diesei	
	CNG LNG		•G	M85_	Other(specify	/)		
Emiss Test	Fuel(s): Indo x Ph2		IG	LPG		an CEP 86 1	13.04	
	Diesel: 13CC	R 2282		40 CFR	86.113-90	40 CFK 80.1	1J-74	
Service Ac	cum: Std AMA Mo	od AMA_	<u>X N</u>	ltr ADP_	Other(specify		Source	
NMOG Te	st Procedure: N/A x Sto	l	Equiv	/ ou	R/L Test Proc. 5		<u> </u>	
Hybrid: T	уре А В С,	AP	U Cycle	e(e.g., Uπ	0, Diesei, Turome).	68 / 10750	ubic Inches	
Engine Con	nfiguration: <u>I-4</u>	Displacer	nent: 1.	$\frac{1}{1}$		5 600	RPM	
Valves per	Cylinder: 4		Rat		100 @	5 200		
			Rat			VD-FT 4	WD-PT	
Engine: F	ront x Mid Rear			ς ΓΜΟ ΓΙΜΟ		······································		
Exhaust EC	CS(e.g., MFI, EGR, TC, CAC	.): <u> </u>	I, EUR,	025, 1 M	ions per SAE 11930	SEP91)		
			(use	abbieviai	ions per arte arte			
	Vahiala Models	Trans	ETW	DPA	Ignition	EGR	Catalytic	
Engine Code/	(if coded see attachment)	(M5,	or	or	(ECM/PCM)	System Port No	converter	
(also		A4	Test	RLHP	Part No.	rait No.	partitio	
list		etc.)	VV L					
495/								
50ST)			<u> </u>				F1(+1	
1	AE101L-AEHDKA	L3	2750	7.1	Before R/C	25620-16270	$\frac{E16^{+}1}{703^{+}2}$	
	AE101L-DEHDKA	4			89661-1A520*4		2052	
2	AF101L-AEHDKA				89661-02200*3			
-	AEIOIL-DEHDKA	4	ļ		After R/C			
3	AF101L-AEHDKA]	7.8	96-TR-8 :			
	AEIOIL-DEHDKA				89661-1A521*4			
	AF1011-AFHDKA				69001-02201 J			
	AEIOIL-DEHDKA		ļ		<u> </u>	-		
5	AF107L-AWPNKA	L4	2875	7.8	89661-1A540*4			
		1		71	89661-02220*3	1		
6	AE102L-AEPNKA			1.1				
	AE102L-AWPNKA			7.8				
7	A E 1021 - A WPNKA			8.5				
<u> </u>		1		70]			
8	AE102L-AEPNKA			1.0				
	AE102L-AWPNKA			8.5	<u></u>	4		
	ATDOOL DI DEV A]	1	60	89661-2D460			
9	AT200L-BLPSKA		1	ĕ.ĭ	0,000,000			
1	ATZOOL-BLPSKA			6.4				
	AT200L-BCPSKA	-	1		1			
10	AT200L-BLPSKA			6.6				
	AT200L-BCPSKA			0.1				
	AT200L-BCPSKA			7.0				
H	A TOOL DI DOKA	1	1	1		1		

17.11.00

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1996 MODEL-YEAR AIR RESOURCES BOARD SUPPLEMENTAL DATA SHEET PASSENGER CARS, LIGHT-DUTY TRUCKS AND MEDIUM-DUTY VEHICLES

Manufacturer: TOYOTA

Exh Eng Fam: TTY1.8VJG1GK

Evap Fam: TTY1047DYMA0

Engine Code/ (also list CA/ 49S/ 50ST)	Vehicle Models (if coded see attachment)	Trans. (M5, A4 ect.)	ETW or Test Wt	DPA or RLH P	Ignition (ECM/PCM) Part No.	EGR System Part No.	Catalytic converter part No.
11	AE101L-AEMDKA AE101L-DEMDKA	M5	2625	7.1	89661-1A510*4 89661-02190*3	25620-16260	E16*1 Z03*2
12	AE101L-AEMDKA AE101L-DEMDKA						
13	AE101L-AEMDKA AE101L-DEMDKA		2750	7.8			
14	AE101L-AEMDKA AE101L-DEMDKA						
15	AE102L-AWMNKA	M5	2750	7.8	89661-1A530*4		
16	AE102L-AEMNKA		2750	7.1	89661-02210*3		
	AE102L-DEWINKA		2875	7.8			
17	AE102L-AWMNKA		2875	8.5			
18	AE102L-AEMNKA		2750	7.8			
	AE102L-DEMNKA AE102L-AWMNKA		2875	8.5			
19	AT200L-BLMSKA AT200L-BCMSKA AT200L-BLMSKA AT200L-BCMSKA		2750	6.0 6.1 6.4	89661-2D450		
20	AT200L-BLMSKA		2875	6.7			
	AT200L-BCMSKA AT200L-BLMSKA AT200L-BCMSKA			7.0			

Comments : Please refer to manufacturer's HP list for correct dyno test HP setting based on model and equipment.

VEHICLE MODELS:

Corolla	Corolla Wagon	Celica			
AE102L-AEMNKA	AE102L-AWMNKA	AT200L-BCMSKA			
AE102L-AEPEKA	AE102L-AWPNKA	AT200L-BCPSKA			
AE102L-AEPNKA		AT200L-BLMSKA			
AE102L-DEMNKA	•	AT200L-BLPSKA			
AE102L-DEPEKA					
AE102L-DEPNKA					

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Note *1 : Maker ; TOYOTA MOTOR CORPORATION

*2 : Maker ; AC ROCHESTER DIVISION OF GENERAL MOTORS.

*3 : Maker ; NIPPONDENSO MANUFACTURING U.S.A., INC

*4 : Maker ; NIPPONDENSO CO.,LTD

E.O.# A -14-281

1996 MODEL-YEAR AIR RESOURCES BOARD SUPPLEMENTAL DATA SHEET PASSENGER CARS, LIGHT-DUTY TRUCKS AND MEDIUM-DUTY VEHICLES 29.85

Manufacturer: TOYOTA Exh Eng Fam: TTY1.8VJG1GK Evap Fam: TTY1047DYMA0 All Eng Codes in Eng Fam: CA x 49S 50S AB965 Exh Std: CA Tier-1 x TLEV LEV ULEV ZEV US EPA Tier-1 Evap std: 50K x Useful Life with R/L In-Use Exh Std: Full In Use x Alt In Use Veh Class(es): PC x LDT1 LDT2 MDV1 MDV2 MDV3 MDV4 MDV5 Single Cert Std for Multi-Class Eng Fam: N/A (specify: N/A, LDT1, MDV1, MDV2, MDV3, MDV4) Fuel Type(s): Dual-Fuel Dedicated x Flex-Fuel Bi-Fuel Gasoline x Diesel CNG LNG LPG M85 Other(specify) Emiss Test Fuel(s): Indo x Ph2 CNG LPG M85 Other(specify) 13CCR 2282 Diesel: 40 CFR 86.113-90 40 CFR 86.113-94 Service Accum: Std AMA Mod AMA Mfr ADP Other(specify) NMOG Test Procedure: N/A x Std Equiv R/L Test Proc: Pt Source SHED Hybrid: Type A APU Cycle(e.g., Otto, Diesel, Turbine): B С Engine Configuration: I-4 Displacement: 1.6 / 1.8 Liters $9\overline{6}.8$ / 107.5 Cubic Inches Valves per Cylinder: 4 Rated HP: 100 a 5,600 RPM Rated HP: 105 5,200 **RPM** @ Engine: Front x Drive: FWD x Mid Rear RWD 4WD-FT 4WD-PT Exhaust ECS(e.g., MFI, EGR, TC, CAC): SFI, EGR, O2S, TWC, HO2S

(use abbreviations per SAE J1930 SEP91)

		Securage#					Sect/Page#
	Authorized Representative	01.02.00	21 Gen Std, increase in Emiss,		<u></u>		
	2 Fuel Specifications	03.00.00		Safety, Meets	all Reqmts		20.03.05
	3 Test Equipment	04.00.00	22	Emission Lab	el Durability		07.00.00
	Test Procedure	05.00.00	23	Driveability S	tatement		17.01.02
	5 Mileage Accumulation Route	02.04.00	24	Adjustable Pa	rameters		08.16.01.00
	5 Emission Warranty Statement	17.10.00	25	Tamper Resist	ance Method(s)	08.16.02.00
	Maint: Cert/Req'd/Recm'd	06.00.00	26	Fill Pipe Spec	ifications		17.04.00
1	B Emiss Label/Vac Hose Diag	07.00.00	27	High Altitude	Compliance		17.02.00
	Evap Control System	19.00.00	28	OBD Sys incl	Marked Revis	ions	02.06.00
10) Engine Parameters	20.01.00	29	I&M Test Pro	cedure & Data		17.11.00
1	Fuel System	08.01.00.00	30	30 50 Degree F Compliance		N/A	
11	l Iginition System	08.01.00.00	31	31 Manufacturer's RAF		N/A	
11	Exhaust Control System	20.02.00	32	32 Phase-In Plans: Exh Cert Stds		N/A	
14	Proj Sales(LDT/MDV Split)	17.13.00		Exh In-Use Stds		17.18.00	
1:	Vehicle Description	20.02.08		Evap Cert Stds		17.19.00	
10	Evap Bench Test Procedure	13.02.02	33	33 NMOG Fleet Average Calculation		17.15.00	
11	R/L Temp & Press Profiles	N/A	34	4 AB965 Credits/Withdrawals		N/A	
18	EDV Selection	02.03.02	35	5 EPA Certificate		after EO	
19	Prod Veh same as Test Veh	17.01.01	36	36 Equiv NMOG ProcARB Approval		N/A	
		Durability	En	nission	Emission	Er	nission
20	Test Vehicle Information	Data Vehicle	Da	ita Vehicle	Data Vehicle	Da	ata Vehicle
	C/O or C/A MY & ID	C/O 95-D2	C/1	O 95-AE5	C/A 95-AE5	i	96-AE2
	Vehicle Log Page(s)	20.03.04	20	.03.04	20.03.04	20	.03.04
	Zero Mile Book Page(s)	17.12.01(95MY)	20	.03.06(95MY)	20.03.06	20	.03.06
	Maint Logs & Engr Eval	17.12.02(95MY)	17	.12.02(95MY)	N/A	17	.02.02

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