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#### State of California AIR RESOURCES BOARD

# EXECUTIVE ORDER A-10-664 Relating to Certification of New Motor Vehicles

#### FORD MOTOR COMPANY

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 Ford Motor Company exhaust emission control systems are certified as described below for light-duty trucks:

Emission Standard Category: Transitional Low-Emission Vehicle (TLEV)

Fuel Type: Gasoline

Engine Family: TFM4.028G2EK <u>Displacement</u>: 4.0 Liters (244 Cubic Inches)

Exhaust Emission Control Systems and Special Features:

Three Way Catalytic Converters (two)
Dual Heated Oxygen Sensors
Heated Oxygen Sensor
Exhaust Gas Recirculation
Sequential Multiport Fuel Injection

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

The non-methane organic gas (NMOG), carbon monoxide (CO), oxides of nitrogen (NOx), and formaldehyde (HCHO) TLEV certification exhaust emission standards for this engine family in grams per mile are:

Loaded Vehicle Weight (lbs.)	<u>Miles</u>	NMOG	<u>.co</u>	NOx	<u>нсно</u>	CO (20°F)
3751-5750	50,000	0.160	4.4	0.7	0.018	12.5
	100,000	0.200	5.5	0.9	0.023	n/a

Reactivity Adjustment Factor (RAF) for NMOG Mass Emission: 0.98

The certification exhaust emission values set forth for NMOG reflect application of a 0.98 RAF for 1996 model-year TLEVs. The TLEV certification exhaust emission values for this engine family in grams per mile are:

Loaded Vehicle Weight (lbs.)	Miles	<u>NMOG</u>	_co_	NÓx	<u>нсно</u>	CO (20°F)
3751-5750	50,000	0.106	1.0	0.2	0.003	3.7
	100,000	0.144	1.4	0.2	0.003	n/a

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 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 "California Motor Vehicle Emission Control Label Specifications" for the aforementioned model year (Title 13, California Code of Regulations, Section 1965).

BE IT FURTHER RESOLVED: That the vehicle manufacturer has demonstrated compliance with the exhaust emission standards at 50 degrees Fahrenheit 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.

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

Executed at El Monte, California this \_\_\_\_\_\_\_

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day of August 1995.

R. Æ. Summerfield

Assistant Division Chief Mobile Source Division

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

Mfgr. <u>FORD M</u>	OTOR COMPANY	Exha	aust Engir	ne Fami	ly: <u>TFM4.02</u>	8G2EK	
Engine Code Typ	pes: CA_X_ 49S	_ 50S Evap	porative H	Emissio	ns Family:	<u> FM1045AYP</u>	BA
Exh Std: Tier-0	) Tier-1	TLEV_X_ LEV_	ULEV_	ZE	V EPA TI	ER-0	TIER-1
Evap Std: 50K	X Useful Life	with R/L	In-Use Ex	h Std:	Full In Use	Alt 1	In Use
Veh Class(es):	PC LDT1	LDT2 <u>X</u> MDV1	L MDV2	м	DV3MDV4	MDV5	
Single Cert Sto	d for Multi-Clas	s Eng Fam: <u>N</u>	<u>'A</u> (spe	cify:	N/A, LDT1,MD	V1,MDV2,MI	OV3,MDV4)
Exh Cert Fuel(	s): Indo Ph2	X Diesel: 1	3 CCR 228	32 o	r 40CFR 86.1	.13-90	or -94
Fuel Type(s):	Dedicated Basoline_X_ Di	Tlex Fuel I	)ual-Fuel_		Other (s	specify)	
Hybrid: Type	A B C	_, APU Cycle	e (eg, (	Otto, D	iesel, Turb	ine)	
77 - 1 //21 . 9	<u>V-6</u> Disp _ <u>X</u> Mid Rea	Rot.	od HP· la	6() (d.	4700 RPM		T_X_
	l System and Spe		Two(²) sfi	<u>г, жо2s</u>		·	
(also list	Vehicle Models (if coded see attachment)	A-Automatic	or		Ignition (ECM/PCM) Part No.		1
558TR15A/N R	anger/Mazda 4x2	A4			F57F-CUA	F3DE-AA F37E-CA	F57A-BD
	C SWB		3875 3875	11.2 12.3*		13,2 011	
	langer/Mazda 4x4 C LWB		3875#	12.0			
	C SWB		3875	12.0			
	C LWB		4000	13.2*			
	C SWB			13.2* 12.0			
	SC SWB		4250 4250	13.2*			
S	C SWB		4230	13,27			

ENGINE FAMILY: TFM4.028G2EK ISSUED: 7-28-95 REVISED: 4-22-96

<sup>\*</sup> with air conditioning

<sup>#</sup> per R/C 4.0-124

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

Mfgr. FORD MOTOR COMPANY	Exha	ust Engin	e Fami	ly: <u>TFM4.02</u>	8G2EK				
Engine Code Types: CA_X 49S_	50S Evar	orative E	missic	ns Family:	rfm1045AYPI	3A			
Exh Std: Tier-0 Tier-1	TLEV_X_ LEV_	ULEV_	ZE	V EPA TI	ER-0T	IER-1			
Evap Std: 50K <u>X</u> Useful Life	with R/L	In-Use Ex	h Std:	Full In Use	Alt I	n Use			
Veh Class(es): PC LDT1	LDT2 <u>X</u> MDV1	MDV2	M	IDV3 MDV <sup>2</sup>	+ MDV5_	<del></del>			
Single Cert Std for Multi-Clas	ss Eng Fam: <u>N</u> /	'A (spe	cify:	N/A, LDT1,MI	OV1,MDV2,MD	0V3,MDV4)			
Exh Cert Fuel(s): Indo Phi	2 <u>X</u> Diesel: 1	.3 CCR 228	2 o	r 40CFR 86.1	.13-90 0	or -94			
Fuel Type(s): Dedicated Casoline_X_ D	G LPG CFlex Fuel I	Oual-Fuel		Other (s	enecify)				
Gasoline_X D. Hybrid: Type A B C	_, APU Cycle	e (eg, (	tto, I	Diesel, Turb	ine)				
Engine Config <u>V-6</u> Displacement: <u>4.0L (244)</u> Liters (Cubic Inches)  Valves/Cyl: <u>2</u> Rated HP: <u>160 @ 4200</u> RPM  Engine: Front X Mid Rear Drive: Fwd RWD X 4WD-FT 4WD-PT X									
Exhaust Control System and Spe	ecial Features	TWC <i>(3)</i> SFI (Use abl	,≥HO2S orevia	s. EGR HO25 tions per SA	E J1930 SE	P91)			
Engine Code Vehicle Models (also list CA/49ST/50ST attachment)	Trans. Type A-Automatic M-Manual	ETW or Test Wt	DPA or RLHP	Ignition (ECM/PCM) Part No.	EGR System Part No.	Catalytic Converter Part No.			
658TR10A/N Ranger/Mazda 4x2	A4		•	F57F-CUB	F3DE-AA F37E-CA	F57A-BD			
SC SWB		3875 3875	11.2 12.3*		13/11 0.1				
Ranger/Mazda 4x4		20754	10.0						
RC LWB		3875# 3875	12.0 12.0						
RC SWB		4000	13.2*						
RC LWB			13.2*						
RC SWB SC SWB		4250	12.0						
SC SWB		4250	13.2*						

<sup>#</sup> per R/C 4.0-124

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

M£	gr. <u>FORD</u>	MOTOR COMPANY	Exh	aust Engir	ne Fami	ly: <u>TFM4.0</u>	28G2EK	
Eng	gine Code T	Types: CA <u>X</u> 49S	50S Eva	porative l	Emissio	ns Family: <u>'</u>	TFM1045AYP	BA
Ext	n Std: Tien	r-0 Tier-1	TLEV <u>X</u> LEV_	ULEV_	ZE	V EPA TI	[ER-0	TIER-1
Eva	ap Std: 50	OK <u>X</u> Useful Life	with R/L	In-Use Ex	h Std:	Full In Use	e Alt :	In Use
Vel	n Class(es)	): PC LDT1	LDT2 <u>X</u> MDV	1 MDV2	2 M	DV3MDV4	4 MDV5	
Sin	ngle Cert S	Std for Multi-Clas	ss Eng Fam: <u>N</u>	<u>/A</u> (spe	cify:	N/A, LDT1,MI	OV1,MDV2,M	DV3,MDV4)
Exl	n Cert Fuel	l(s): Indo Ph2 M85 CN0	2 <u>X</u> Diesel: 3 G LPG 0	13 CCR 228 Other (spe	32o	r 40CFR 86.1	113-90	or -94
Fue	el Type(s)	: Dedicated D: Gasoline_X D:	Flex Fuel 1	Dual-Fuel		Other (	specify)	
Hyl	orid: Type	e A B C	, APU Cycl	e (eg,	Otto, I	Diesel, Turb	ine)	
	gine Confi lves/Cyl: _	g <u>V-6</u> Disp	lacement: <u>4.</u> Rat	OL (244) ed HP: 1	I 60@	iters (Cubi 4200 RPM	c Inches)	
Eng	gine: Fro	nt <u>X</u> Mid Rea	ar Dri	ve: Fwd_	RWI	<u>X</u> 4WD-FT		
Ex	haust Cont	rol System and Spe	ecial Features	TWC(²)SF (Use ab	L.2H02S brevia	<u>, EGR                                   </u>	<i>S</i> E J1930 SE	P91)
En	gine Code	Vehicle Models			DPA		EGR	Catalytic
	lso list /49ST/50ST		A-Automatic M-Manual		or RLHP	(ECM/PCM) Part No.		Converter Part No.
65	8TR11A/N	Ranger/Mazda 4x2	A4			F57F-CUC	F3DE-AA F37E-CA	F57A-BD
		SC SWB		3875	11.2			
		SC SWB		3875	12.3*			
		Ranger/Mazda 4x4						
		RC LWB		3875#	12.0			
		RC SWB		3875	12.0			
		RC LWB		4000	13.2*			
		RC SWB		3875#	13.2*			
		SC SWB		4250	12.0			
		SC SWB		4250	13.2*			

<sup>\*</sup> with air conditioning

<sup>#</sup> per R/C 4.0-124