State of California AIR RESOURCES BOARD

EXECUTIVE ORDER A-10-678 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 passenger cars:

Fuel Type: Gasoline

Engine Family: TFM4.6V8GFEL <u>Displacement</u>: 4.6 Liters (280 Cubic Inches)

Exhaust Emission Control Systems and Special Features:

Dual Three Way Catalytic Converters (two)

Dual Heated Oxygen Sensors (two)

Exhaust Gas Recirculation

Sequential Multiport Fuel Injection

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:

Miles	Non-Methane	Carbon	Nitrogen	Carbon	
	<u>Hydrocarbons</u>	<u>Monoxide</u>	<u>Oxides</u>	Monoxide (20°F)	
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 (20°F)</u>
50,000	0.07	1.1	0.1	6.5
100,000	0.08	1.3	0.2	n/a

BE IT FURTHER RESOLVED: That the vehicle manufacturer is certifying the listed vehicle models to the running loss and useful life standards applicable to 1995 and subsequent 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 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 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 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 manufacturer is certifying the listed vehicle models with a partially complying on-board diagnostic system for the aforementioned model year pursuant to Title 13, California Code of Regulations, Section 1968.1(m)(6.1) ("Malfunction and Diagnostic System Requirements--1994 and Subsequent Model-Year Passenger Cars, Light-Duty Trucks, and Medium-Duty Vehicles and Engines").

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 2

day of September 1995.

R. B. Summerfield

Assistant Division Chief Mobile Source Division

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

	Ford Motor Com						
	: 50K						
Exhaust Std:	Tier 0 Tier 1 <u>></u>	C TLEV _ LE	v ui	_EV	ZEV;	EPA Tier 0 T	ier 1 <u>X</u>
	es): PC X LD						
Single Cert St	d for Multi-Class	Eng Fam: N	/A (sp	ecity N	I/A, LDT1, N	ADV1, MDV2, MD)V3, MDV4)
			, m. 101 / 10	,			
Fuel Type(s):	Dedicated F	lex-Fuel [Other	el (spec	Gasoline <u>X</u> ity)	_ Diesel M85	<u>-</u>
Hybrid: Type	ABC_	APU Cyd	cle (e.g	., Otto	Diesel, Tu	rbine)	
Engine Config	: <u>V-8</u>	Liter (CID):	4.6 (2	<u>(80.0)</u>			_
Engine: Front	X Mid. Rea	ar Driv	e: FW	D _ F	WD <u>X</u> 4	ND-FT 4WD-	PT
Exhaust ECS (Use abbrev	& Special Featur iations per SAE	es: <u>SFI/2HO</u> J1930, Sep 9	<u>25(2)/E</u> 1)	GR/2T	<u>WC(2)</u>		
Engine Code (California)	Vehicle Models	Trans. Type A-Automatic M-Manual	ETW	DPA	Ignition (PCM) Part No. -12A650-	Part No.	Part No.
		<u> </u>	4250	82		F6AE-BA/F6AE-AE	
618ERO5A	LIMO			8.1			
	LIMO	•	4750	•			
	LINCOLN VFL3		5250	8.2			
	LINCOLN VFL4	A	5500	7.8			
	LIMO		1				
		A	6000 ¹	7.5 16.4			

LIMO PREP PACKAGE USES P225/75R15 TIRES

ENGINE FAMILY: TFM4.6V8GFEL [ssued: 8/14/95

Revised:

¹ LIGHT DUTY VEHICLES OVER 5,750 LBS. LOADED VEHICLE WEIGHT SHALL BE TESTED AT A 5,500 LB. EQUIVALENT TEST WEIGHT PER 40 CFE PART 86.129.94

E.O.# __A-10-678

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

	Ford Motor Com					: TFM4.6V8GFE	
•	: 50K U						
Exhaust Std: 1	⊓er 0 <u> </u>	(_TLEVLE	V UL	.EV	ZEV; E	PA Tier 0 T	ier 1 <u>X</u>
	es): PC X LD						
	d for Multi-Class						
			Milei (a)	pecity/			
Fuel Type(s):	Dedicated F	lex-Fuel [LPG)ual-Fu Other	el ((speci	Gasoline <u>X</u> fy)	Diesel M85	<u>-</u>
Hybrid: Type	ABC_	APU Cyc	de (e.g.	, Otto,	Diesel, Tur	bine)	
	: <u>V-8</u>						
Engine: Front	X Mid. Rea	ır Driv	e: FW() F	RWD <u>X</u> 4V	VD-FT 4WD-F	PT
Exhaust ECS (Use abbrevi	& Special Featur iations per SAE	es: <u>SFI/2HO</u> 11930, Sep 91	<u>2S(2)/E</u> I)	GR/2T	<u>WC(2)</u>		
- 1 . 0 . d .							
(California)	Vehicle Models	A-Automatic	ETW		(F Olar)	EGR System Part No. 9D475/9D477	Part No.
	Vehicle Models LINCOLN VFL1	M-Manual			Part No. -12A650-	Part No.	Part No. -5E212
(California)	LINCOLN VFL1	A-Automatic M-Manual			Part No. -12A650-	Part No. 9D475/9D477	Part No. -5E212
(California)	LINCOLN VFL1	A-Automatic M-Manual A	4250	8.2	Part No. -12A650-	Part No. 9D475/9D477	Part No. -5E212
(California)	LINCOLN VFL1 LINCOLN VFL2 LING LING LING LING LING LING LING LING	A-Automatic M-Manual A A	4250 4750 5250 5500	8.2 8.1	Part No. -12A650-	Part No. 9D475/9D477	Part No. -5E212
(California)	LINCOLN VFL1 LINCOLN VFL2 LINCOLN VFL3 LINCOLN VFL4	A-Automatic M-Manual A A A A	4250 4750 5250	8.2 8.1 8.2	Part No. -12A650-	Part No. 9D475/9D477	Part No. -5E212

LIMO PREP PACKAGE USES P225/75R15 TIRES

ENGINE FAMILY: TFM4.6V8GFEL ISSUED: 8/14/95

REVISED:

20.09.17.02 - 2 R/C 4.6-2V-013

¹ LIGHT DUTY VEHICLES OVER 5,750 LBS. LOADED VEHICLE WEIGHT SHALL BE TESTED AT A 5,500 LB. EQUIVALENT TEST WEIGHT PER 40 CFE PART 86.129.94

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

	Ford Motor Comp					r: TFM4.6V8GFEI	
Evap Standard:	50K X Use	eful Life with I	R/L	E\	ap Family	: TFM1090AYME	D
						PA Tier 0 Tier 1	
						/3 _ MDV4 _ MD	
Single Cert Std	for Multi-Class E	ing Fam: <u>N/</u>	A (spe	cify N/A	A, LDT1, M	IDV1, MDV2, MDV	/3, MDV4)
Exh Cert Fuel(s): Indo <u>X</u> Ph2 M85 _ CNG _	Diesel: ^ _ LPG Oth	13 CCF er (spe	R 2282 cify) _	_ or 40 CF	=R 86.113-90 or 	· -94 _
(CNG LNG _	_ LPG C	omer (s	pecity)			
Hybrid: Type	ABC	, APU Cycle	(e.g., (Otto, Di	esel, Turbi	ne)	
Engine Config	<u>V-8</u>	Liter (CID):	4.6 (2	280.0)			
Engine: Front_	X Mid Rear	Driv	e: FW	'D _ R	WD <u>X</u> 4	WD-FT 4WD-P	Τ_
Exhaust ECS (Use abbrevi	& Special Feature ations per SAE J	es: <u>SFI/2HO2</u> 1930, Sep 91	2S(2)/E)	GR/2T	WC(2)		
Engine Code (California)						EGR System Part No.	
(Oamorna)				-12A6	50- <u>9D47</u>	75/9D477 -5E212-	
618ER10A	LINCOLN VFL1	Α	4250	8.2	F6AF-AC	F6AE-BA/F6AE-AE	F6AC-DA
	LINCOLN VFL2	Α	4750	8.1			
	LINCOLN VFL3	Α	5250	8.2			
	LINCOLN VFL4	Α	5500	7.8			
	LINCOLN VFL5	Α	6000 ¹	7.5			
	LINCOLN VFL6 (HEARSE)	Α	6000 ¹	16.4			

LIMO PREP PACKAGE USES P225/75R15 TIRES

¹LIGHT DUTY VEHICLES OVER 5,750 LBS. LOADED VEHICLE WEIGHT SHALL BE TESTED AT A 5,500 LB. EQUIVALENT TEST WEIGHT PER 40 CFE PART 86.129.94

1996 AIR RESOURCES BOARD SUPPLEMENTAL DATA SHEET

PASSENGER CARS, LIGHT-DUTY TRUCKS AND MEDIUM-DUTY VEHICLES

Manufacturer:	Ford Motor Com	рапу	Exha	aust En	igine Famil	y: TFM4.6V8GF	EL
Evap Standard	i: 50K <u>X</u> Us	eful Life with	R/L	_ Ev	ap Family:	TFM1090AYMI	ĒD
Exhaust Std:	Tier 0 _ Tier 1 <u>X</u>	TLEV_LEV	_ ULE	:V _ Z!	EV_; EP.	A Tier 0 Tier	1 <u>X</u>
Vehicle Class(es): PC <u>X</u> LD1	T1 _ LDT2 _	MDV1	MD	V2 _ MDV	/3 _ MDV4 _ M	DV5 _
Single Cert Sto	d for Multi-Class (Eng Fam: <u>N//</u>	<u>A</u> (spe	cify N/A	LDT1, M	DV1, MDV2, M D	V3, MDV4)
Exh Cert Fuel	(s): Indo <u>X</u> Ph2 M85 _ CNG	Diesel: 1 LPGOth	3 CCR er (spe	2282 cify)	_ or 40 CF	R 86.113-90	or -94 _
Fuel Type(s):	Dedicated Floor	ex-Fuel Du LPG C	al-Fuel ther (s	Ga pecify)	soline <u>X</u>	Diesel M85 _	
Hybrid: Type	A B C	, APU Cycle	(e.g., O	tto, Die	esel, Turbir	ne)	
	: <u>V-8</u> Lite						÷
Engine: Front	X Mid Rear	Drive: FW	D_ R	<u>X</u> dw	_ 4WD-FT	4WD-PT _	
Exhaust ECS (Use abbrevi	& Special Feature iations per SAE J	es: <u>SFI/2HO2</u> 1930, Sep 91)	S(2)/E	<u>GR/2T</u>	<u>NC(2)</u>		
Engine Code (California)	Vehicle Models	Trans. Type A-Automatic M-Manual	ETW	DPA	(PCM) Part No.		Catalyst Part No.
		-			-12A030-	30413/300417	
618ER11A	LINCOLN VFL1	Α	4250	8.2	F6AF-AE	F6AE-BA/F6AE-	AE F6AC-DA
	LINCOLN VFL2	Α	4750	8.1			
	LINCOLN VFL3	Α	5250	8.2			
	LINCOLN VFL4	Α	5500	7.8			
	LINCOLN VFL5	Α .	6000 ¹	7.5			
	2,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,						

¹ LIGHT DUTY VEHICLES OVER 5,750 LBS. LOADED VEHICLE WEIGHT SHALL BE TESTED AT A 5,500 LB. EQUIVALENT TEST WEIGHT PER 40 CFE PART 86,129,94

LIMO PREP PACKAGE USES P225/75R15 TIRES

ENGINE FAMILY: TFM4.6V8GFEL ISSUED: 5/24/96 REVISED: 20.09.17.02 - 5

R/C 4.6-2V-048