State of California AIR RESOURCES BOARD

EXECUTIVE ORDER A-10-566-1 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 Orders G-45-3 and G-45-4;

IT IS ORDERED AND RESOLVED: That 1994 model-year Ford Motor Company exhaust emission control systems are certified as described below for passenger cars:

Fuel Type: Gasoline

Engine Family: RFM4.6V8G1EA <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
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
	<u>Hydrocarbons</u>	<u>Monoxide</u>	<u>Oxides</u>
50,000	0.25	3.4	0.4
100,000	0.31	4.2	n/a

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

<u>Miles</u>	Non-Methane	Carbon	Nitrogen
	<u>Hydrocarbons</u>	<u>Monoxide</u>	<u>Oxides</u>
50,000	0.11	0.9°	0.2
100,000	0.15	1.3	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 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 on January 14, 1993, the Air Resources Board approved the repeal of the currently-effective requirement that each manufacturer certify a minimum of 80 percent of its projected sales of 1994 model-year California-certified passenger cars and light-duty trucks to the phase-in standards for non-methane hydrocarbons (NMHC), or the more stringent standards in section 1960.1(g)(2) of Title 13, California Code of Regulations. If the repeal of such requirement does not become effective by December 31, 1993, the manufacturer shall submit a plan for compliance with the requirement; passenger cars and light-duty trucks not meeting such phase-in or more stringent standards shall be certified only to the extent allowed under the requirement.

BE IT FURTHER RESOLVED: That the listed vehicle models also comply with "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 listed vehicle models also comply with the "Malfunction and Diagnostic System for 1988 and Subsequent Model-Year Passenger Cars, Light-duty Trucks, and Medium-Duty Vehicles with Three-Way Catalyst Systems and Feedback Control" (Title 13, California Code of Regulations, Section 1968) for the aforementioned model year.

BE IT FURTHER RESOLVED: That the listed vehicle models have been exempted from compliance with the "Malfunction and Diagnostic System Requirements-1994 and Subsequent Model-Year Passenger Cars, Light-duty Trucks, and Medium-Duty Vehicles and Engines" pursuant to Title 13, California Code of Regulations, Section 1968.1(m)(2.0) 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.

Executive Order A-10-566 dated July 22, 1993, is cancelled by Executive Order A-10-566-1.

Executed at El Monte, California this 2/day of September, 1993.

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R. E. Summerfield
Assistant Division Chief
Mobile Source Division

Manufacture	FORD MOTOR	COMPANY	•	Eng. F	amily <u>RFM4.6V</u>	8G1EA	
Pass Cars_X	Lt-Duty Truc	ks l	led-Duty	Vehicle	es Fuel T	ype <u>UNLEA</u>	DED
Eng. Type	V-8 Liter	(CID)	4.6 (2	(80) Eva	ap. Family RF	M1045AYP0	A
	ntrol System &				-		· ·
Emission Co	ntrol System & Use abbr	Special eviation	Feature s per S	s <u>2TWC/21</u> AE J1930	<u>102S/EGR/SFI</u>) June88)		
Fraince Fra	•						
Engine: Fro	nt_X_MidR	tear I	rive: F	WD RV	VD <u>X</u> 4WD-FT_	4WD-PT	
Eng.	Veh. Models	Trans.	ETW	RLHP	Ign. Sys.	EGR	Catalyst
Code/	(If Coded	Type:			(PCME/PROM)		Part No.
(Cert	see	A-Auto			Part No.	Part No	1
Std.)	Attachmt.)	M-Man.			-12A650-	-9D475-	-5E214-
418MR00A	FORD AFC	A	4000	9.6	F4VF-DA	F1AE-AD	F4AC-GB
•				1			F4AC-GB
	MERCURY MFA	A	4000	9.4	F4VF-DA	F1AE-AD	F4AC-GB
							F4AC-GB
418NR00A	FORD AFC	A	4000	9.61	F4VF-EA	F1AE-AD	F4AC-GB
				1			F4AC-GB
				9.22	F4VF-EA	FLAE-AD	F4AC-GB
	Ì [1 .			F4AC-GB
	MERCURY MFA	A	4000	9.41	F4VF-EA	Flae-AD	F4AC-GB
						1	F4AC-GB
				10.32	F4VF-EA	Flae-ad	F4AC-GB
							F4AC-GB
418QR00A	LINCOLN VFC	A	4250	8.61	F4VF-FA	F1AE-AD	F4AC-GB
							F4AC-GB
				9.22	F4VF-FA	FLAE-AD	F4AC-GB
							F4AC-GB
418SR00A	LINCOLN VFC	A	4250	8.61	F4VF-HA	Flae-AD	F4AC-GB
						* *****	F4AC-GB
				9.22	F4VF-HA	F1AE-AD	F4AC-GB
							F4AC-GB
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Certification Standards

1 with P215/70R15 tires ² with P225/70R15 tires

<u>50K</u> 100K NMHC: 0.25 0.31 CO: 3.4 4.2 NOx: 0.4 EVAP: 2.0

Idle HC/CO Standards

Idle HC 220 ppm @ 2500 rpm 100 ppm @ idle Idle CO 1.2% @ 2500 rpm 1.0% @ idle

ENGINE FAMILY: RFM4.6V8G1EA ISSUED: 7/12/93 REVISED:

Manufacturer FORD MOTOR COMPANY Eng. Family RFM4.6V8G1EA										
Pass Cars X Lt-Duty Trucks Med-Duty Vehicles Fuel Type UNLEADED										
Eng. Type V-8 Liter (CID) 4.6 (280) Evap. Family RFM1045AYPOA										
Emission Control System & Special Features 2TWC/2HO2S/EGR/SFI (Use abbreviations per SAE J1930 June88)										
(Use abbreviations per SAE J1930 June80) Engine: Front X Mid. Rear Drive: FWD RWD X 4WD-FT 4WD-PT										
Eng. Code/ (Cert Std.)	Veh. Models (If Coded see '	Trans. Type: A-Auto M-Man.	ETW	RLHP	Ign. Sys. (PCME/PROM) Part No. -12A650-	EGR Syst. Part No -9D475-	Catalyst Part No. -5E212- -5E214-			
418MR00A	FORD AFC	A	4000	9.6	F4VF-DA	F1AE-AD	F4AC-GB F4AC-GB			
	MERCURY MFA	A	4000	9.4	F4VF-DA	F1AE-AD	F4AC-GB F4AC-GB			
418NR00A	FORD AFC	A	4000	9.61	F4VF-EA	F1AE-AD	F4AC-GB F4AC-GB			
				9.22	F4VF-EA	F1AE-AD	F4AC-GB F4AC-GB			
	MERCURY MFA	Α	4000	9.41	F4VF-EA	Flae-AD	F4AC-GB F4AC-GB			
				10.3 ²	F4VF-EA	F1AE-AD	F4AC-GB F4AC-GB			
418QR00A	LINCOLN VFC	A	4250	8.6 ¹	F4VF-FA	F1AE-AD	F4AC-GB F4AC-GB			
	, 			9.22	F4VF-FA	F1AE-AD	F4AC-GB F4AC-GB			
418SR00A	LINCOLN VFC	A	4250	8.61	F4VF-HA	Flae-aD	F4AC-GB F4AC-GB			
				9.23	F4VF-HA	F1AE-AD	F4AC-GB F4AC-GB			
1 with P215/ 2 with P225/ 3 with P225/		/75R15 ti	res							
	 	l	L				<u> </u>			

Certification Standards

50K <u>100K</u> 0.25 0.31 NMHC: 4.20 CO: 3.40 0.40 NOx: 2.0

Idle HC/CO Standards

Idle HC 220 ppm @ 2500 rpm 100 ppm @ idle Idle CO 1.2% @ 2500 rpm 1.0% @ idle

ENGINE FAMILY: RFM4.6V8G1EA ISSUED: 7/12/93 REVISED: 8/31/93

EVAP:

Manufacturer FORD MOTOR COMPANY Eng. Family RFM4.6V8G1EA									
Pass Cars X Lt-Duty Trucks Med-Duty Vehicles Fuel Type UNLEADED									
Eng. Type V-8 Liter (CID) 4.6 (280) Evap. Family RFM1045AYPOA									
Emission Control System & Special Features 2TWC(2)/2HO2S/EGR/SFI (Use abbreviations per SAE J1930 June88)									
	•		_			/ xxp 2000			
Engine: From	nt <u>X</u> Mid F	Rear I	rive: F	WD RV	10 <u>x</u> 4WD-FI_	4WD-FI			
Eng.	Veh. Models	Trans.	ETW	RLHP	Ign. Sys.	EGR	Catalyst		
Code/	(If Coded	Type:			(PCME/PROM)		Part No.		
(Cert	see	A-Auto			Part No.	Part No	1		
Std.)	Attachmt.)	M-Man.			-12A650-	-9D475-	-5E214-		
418MR00A	FORD AFC	A	4000	9.6	F4VF-DA	F1AE-AD	F4AC-GB		
					F4VF-DB		F4AC-GB		
	MERCURY MFA	A	4000	9.4	F4VF-DA	F1AE-AD	F4AC-GB		
					F4VF-DB		F4AC-GB		
418NR00A	FORD AFC	A	4000	9.61	F4VF-EA	F1AE-AD	F4AC-GB		
, -					F4VF-EB		F4AC-GB		
				9.2^{2}	F4VF-EA	Flae-AD	F4AC-GB		
					F4VF-EB	}	F4AC-GB		
	MERCURY MFA	A	4000	9.4^{1}	F4VF-EA	F1AE-AD	F4AC-GB		
					F4VF-EB		F4AC-GB		
		!		10.3^2	F4VF-EA	F1AE-AD	F4AC-GB		
					F4VF-EB		F4AC-GB		
418QRÒOA	LINCOLN VFC	A	4250	8.61	F4VF-FA	FlaE-AD	F4AC-GB		
4204110011		•			F4VF-FB		F4AC-GB		
				9.22	F4VF-FA	Flae-AD	F4AC-GB		
	-			1	F4VF-FB		F4AC-GB		
418SR00A	LINCOLN VFC	A	4250	8.61	F4VF-HA	FlAE-AD	F4AC-GB		
410210011	221100121 120		1		F4VF-HB		F4AC-GB		
		<i>*</i>		9.2^{3}	F4VF-HA	F1AE-AD	F4AC-GB		
		1			F4VF-HB		F4AC-GB		
¹ with P215,	/70R15 tires								
² with P225) ·			İ				
³ with P225	/70R15 or P225,	/75R15 t:	ires						

Certification Standards

<u>50K</u> <u>100K</u> 0.31 0.25 NMHC: 4.20 CO: 3.40 0.40 N0x:EVAP: 2.0

Idle HC/CO Standards

220 ppm @ 2500 rpm Idle HC 100 ppm @ idle Idle CO 1.2% @ 2500 rpm 1.0% @ idle

ENGINE FAMILY: RFM4.6V8G1EA ISSUED: 7/12/93 REVISED: 8/31/93 12/9/93

Manufacturer FORD MOTOR COMPANY Eng. Family RFM4.6V8G1EA									
Pass Cars X Lt-Duty Trucks Med-Duty Vehicles Fuel Type UNLEADED									
Eng. Type V-8 Liter (CID) 4.6 (280) Evap. Family RFM1045AYPOA									
Emission Control System & Special Features 2TWC(2)/2HO2S/EGR/SFI (Use abbreviations per SAE J1930 June88)									
Engine: Front X Mid. Rear Drive: FWD RWD X 4WD-FT 4WD-PT									
Eng. Code/ (Cert Std.)	Veh. Models (If Coded see Attachmt.)	Trans. Type: A-Auto M-Man.	ETW	RLHP	Ign. Sys. (PCME/PROM) Part No. -12A650-	EGR Syst. Part No -9D475-	Catalyst Part No. -5E212- -5E214-		
418SR00A	LINCOLN VFL5	A	5500*	10.4	F4VF-HA F4VF-HB	F1AE-AD	F4AC-GB F4AC-GB		
418SR00A	LINCOLN VFL4	A	5500	10.4	F4VF-HA F4VF-HB	F1AE-AD	F4AC-GB F4AC-GB		
418SR00A	LINCOLN VFL3	A	5250	10.6	F4VF-HA F4VF-HB	F1AE-AD	F4AC-GB F4AC-GB		
418SR00A	LINCOLN VFL2	A	4750	10.6	F4VF-HA F4VF-HB	F1AE-AD	F4AC-GB F4AC-GB		
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Certification Standards

100K <u>50K</u> 0.25 0.31 NMHC: 4.20 3,40 CO:

0.40 NOx: 2.0 EVAP:

Idle HC/CO Standards

220 ppm @ 2500 rpm Idle HC

100 ppm @ idle

Idle CO 1.2% @ 2500 rpm

1.0% @ idle

ENGINE FAMILY: RFM4.6V8G1EA

ISSUED: 12/9/93 REVISED:

Manufacturer FORD MOTOR COMPANY Eng. Family RFM4.6V8G1EA									
Pass Cars X	Lt-Duty Truck	cs M	ed-Duty	Vehicle:	s Fuel Ty	pe <u>UNLEAD</u>	<u>ED</u>		
Eng. Type	V-8 Liter	(CID)	4,6 (28	<u>0)</u> Eva	p. Family <u>RFM</u>	1045AYP0A			
Emission Con	trol System & :	Special	Features	2TWC(2)/2HO2S/EGR/S	FI			
	(Use abbr	eviation	s per SA	E J1930	June88)				
Engine: Fron	t <u>X</u> Mid R	ear D	rive: FV	IDRW	D <u>X</u> 4WD-FT_	4WD-PT_	_		
Eng. Code/ (Cert	Veh. Models (If Coded	Trans. Type: A-Auto	ETW	RLHP	Ign. Sys. (PCME/PROM) Part No.	Part No			
Std.)	Attachmt.)	M-Man.			-12A650-	-9D475-	-5E214-		
418MR00A	FORD AFC	A	4000	9.6	F4VF-DA F4VF-DB	F1AE-AD	F4AC-GB F4AC-GC F4AC-GD F4AC-GE		
							F4AC-GB F4AC-GC		
	MERCURY MFA	A	4000	9.4	F4VF-DA F4VF-DB	F1AE-AD	11		
418NR00A	FORD AFC	A	4000	9.61	F4VF-EA F4VF-EB	F1AE-AD	H H		
				9.22	F4VF-EA F4VF-EB	F1AE-AD	11 0		
	MERCURY MFA	A	4000	9.41	F4VF-EA F4VF-EB	F1AE-AD	11		
				10.3 ²	F4VF-EA F4VF-EB	F1AE-AD	11		
418QR00A	LINCOLN VFC	A	4250	8.61	F4VF-FA F4VF-FB	FlAE-AD	10		
				9.22	F4VF-FA F4VF-FB	F1AE-AD	11		
2 with P225	 5/70R15 tires 5/70R15 5/70R15 or P225	5/75R15 t	ires						

Certification Standards

<u>100K</u> <u>50K</u> NMHC: 0.25 0.31 4.20 3.40 CO: 0.40 NOx:

EVAP: 2.0

Idle HC/CO Standards

Idle HC 220 ppm @ 2500 rpm100 ppm @ idle

Idle CO 1.2% @ 2500 rpm

1.0% @ idle

ENGINE FAMILY: RFM4.6V8G1EA ISSUED: 7/12/93 REVISED: 8/31/93 12/9/93 2/3/94

Manufacturer FORD MOTOR COMPANY Eng. Family RFM4.6V8G1EA									
Pass Cars X	Lt-Duty Truc	ks M	led-Duty	Vehicle	es Fuel Ty	pe <u>UNLEAI</u>	DED		
Eng. Type	V-8 Liter	(CID)	4.6 (28	<u>30)</u> Eva	np. Family <u>RF</u>	<u> 11045AYP0</u>	<u>4</u>		
Emission Cor	ntrol System & (Use abbr	Special reviation	Features as per SA	s <u>2TWC(2</u> AE J1930	2)/2HO2S/EGR/) June88)	SFI			
Engine: From	nt <u>X</u> Mid R	Rear D	rive: F	WD RV	VD <u>X</u> 4WD-FT_	4WD-PT			
Eng. Code/ (Cert Std.)	Veh. Models (If Coded see Attachmt.)	Trans. Type: A-Auto M-Man.	ETW .	RLHP	Ign. Sys. (PCME/PROM) Part No. -12A650-	EGR Syst. Part No -9D475-	Catalyst Part No. -5E212- -5E214-		
418SR00A	LINCOLN VFC	A	4250	8.6 ¹ 9.2 ³	F4VF-HA F4VF-HB F4VF-HA F4VF-HB	F1AE-AD	16 18 11		
418SR00A	LINCOLN VFL5	A	5500*	10.4	F4VF-HA F4VF-HB	FlAE-AD	31 11		
418SR00A	LINCOLN VFL4	A	5500	10.4	F4VF-HA F4VF-HB	F1AE-AD	14 91		
418SR00A	LINCOLN VFL3	A	5250	10.6	F4VF-HA F4VF-HB	F1AE-AD	H H		
418SR00A	LINCOLN VFL2	A	4750	10.6	F4VF-HA F4VF-HB	F1AE-AD	† 11 		
							-		
² with P225	 /70R15 tires /70R15 /70R15 or P225/	/75R15 ti	res						

Certification Standards

50K <u>100K</u> 0.31 NMHC: 0.25 3.40 4,20 CO: NOx: 0.40

Idle HC/CO Standards

Idle HC 220 ppm @ 2500 rpm 100 ppm @ idle Idle CO 1.2% @ 2500 rpm 1.0% @ idle

ENGINE FAMILY: RFM4.6V8G1EA ISSUEO: 12/9/93 REVISED: 2/3/94

EVAP: 2.0