State of California AIR RESOURCES BOARD

EXECUTIVE ORDER A-10-755 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 1998 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 (Certification Fuel): Gasoline (Indolene)

Engine Family: WFMXT03.0HAA Displacement: 3.0 Liters (183 Cubic Inches)

Exhaust Emission Control Systems & Special Features:

Dual Three Way Catalytic Converters Three Way Catalytic Converter 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 non-methane organic gases (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.)	Miles	NMOG	<u></u>	<u>NOx</u>	<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	

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

Loaded Vehicle Weight (lbs.)	Miles	NMOG	<u></u>	<u>NOx</u>	<u>нсно</u>	CO (20°F)	
3751-5750	50,000	0.070	1.3	0.1	0.001	4.9	
	100,000	0.079	1.6	0.1	0.001	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 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 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 and Smog Index 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 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 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 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 27 d

R. B. Summerfield, Chief

_ day of July 1997.

Mobile Source Operations Division

1998 AIR RESOURCES BOARD SUPPLEMENTAL DATA SHEET PASSENGER CARS, LIGHT-DUTY TRUCKS AND MEDIUM-DUTY VEHICLES

Manufacturer:	Ford Motor Company		Exhaus	t Eng	jine Family: <u>\</u>	WFMXT03.0H	<u>AA</u>	
Evap Standard: 50K Useful Life with R/L X Evap Family: WFMXE0105B1E								
Exhaust Std:	Tier 0 Tier 1 TLEV	/ <u>X</u> _LEV_	_ ULEV	_ ZF	EV _ ; EPA T	ier 0 Tier	1	
Vehicle Class	(es): PC _ LDT1	LDT2 X	MDV1	_ Mi	DV2 _ MDV3	_ MDV4 _ N	IDV5	
	d for Multi-Class Eng F							
	(s): Indo <u>X</u> Ph2 [M85 _ CNG _ LP	Diesel: 13	CCR 22	82 _				
Fuel Type(s):	Dedicated X Flex-Fu CNG LNG LP	el Dual G Oth	l-Fuel _ ner (spec	Gas ify)	oline X Dies	sel _ M85		
Hybrid: Type	A B C, APU	J Cycle (e	.g., Otto,	Dies	sel, Turbine)			
Engine Config	g: <u>V-6</u> Liter (CID)): <u>3.0 (18</u>	<u>(3)</u>					
Engine: Front	X Mid Rear Dr	ive: FWD	RW	D <u>X</u>	4WD-FT_	4WD-PT <u>X</u>		
(Use abbrev	& Special Features: <u>S</u> iations per SAE J1930,	Sep 91)						
Engine Code	Vehicle Models Tran A-Au	s. Type litomatic	≘TW DF		(PCM)	EGR System	Catalyst	
(California)	M-M	anual			Part No. -12A650-	Part No. -9D475-	Part No.	
856SR00A	B-Series 4x2 SKS L4 Ranger 4x2 SKS L4	•	750 12 750 12		F87-AFA	F87E-GA	F87A-5F250-CE F87A-5E212-ED	
856RR00N	Ranger 4x4 RKL LA Ranger 4x4 RKS LA Ranger 4x4 SKS 4dr LA Ranger 4x4 SKS 2dr LA B-Series 4x4 RKS LA B-Ser. 4x4 SKS 4dr LA B-Ser. 4x4 SKS 2dr LA	4 3 4 4 4 4 4 3 4 4	000 13 000 13 875 13 000 13	.0 .0	F87F-ADA	F87E-GA		
856RR00A	Ranger 4x4 RKL L Ranger 4x4 RKS L Ranger 4x4 SKS 2dr L Ranger 4x4 SKS 4dr L B-Ser.4x4 SKS 4dr L	4 3 4 3 4 4 4 4	.875* 14 .875 14 .000 14	.3 l.3 l.3 l.3				
		.4 3	1875 14 1000 14	1.3				

^{*} Ford elects to conduct certification tests in the next higher ETW.

1998 AIR RESOURCES BOARD SUPPLEMENTAL DATA SHEET PASSENGER CARS, LIGHT-DUTY TRUCKS AND MEDIUM-DUTY VEHICLES

Manufacturer:	Ford Motor Company	,	Exha	ust En	gine Family: <u>\</u>	VFMXT03.0H	<u>44</u>
Evap Standard	: 50K Useful l	Life with	R/L X	<u>C</u> Ev	ap Family: <u>W</u> I	MXE0105B1	
Exhaust Std:	Γier 0 _ Tier 1 _ TLE	V <u>X</u> LEV	_ ULE	v_ze	EV_; EPAT	ier 0 Tier 1	
Vehicle Class(es): PC _ LDT1	LDT2_	X MD\	/1 M	DV2 _ MDV3	_ MDV4 _ M	DV5
Single Cert Sto	d for Multi-Class Eng F	am: <u>N//</u>	A (spec	ify N/A	, LDT1, MDV	i, MDV2, MDV	′3, MDV4)
Exh Cert Fuel(s): Indo <u>X</u> Ph2 _ M85 _ CNG _ LP	Diesel: 1 PG _ Oth	13 CCR er (spec	2282 _ cify)	_ or 40 CFR 8	6.113-90 <u> </u>	-94
Fuel Type(s):	Dedicated _XFlex-Fu	uel Du PG O	al-Fuel other (sp	Gas pecify)	soline <u>X</u> Dies	sel M85	
Hybrid: Type	A B C, AP	U Cycle ((e.g., Ot	tto, Die	sel, Turbine)		
Engine Config	: <u>V-6</u> Liter (CII	D): <u>3.0 (</u> 1	<u> 183)</u>				
	X Mid Rear D					4WD-PT <u>X</u>	
Exhaust ECS (Use abbrevi	& Special Features: <u>.5</u> ations per SAE J1930	SFI/2HO2 , Sep 91)	SÆGR	/2TWC	/Twc		
Engine Code	Vehicle Models Tran	ns. Type	ETW	DPA	Ignition (PCM)	EGR System	Catalyst
(California)		utomatic //anual			Part No. -12A650-	Part No. -9D475-	Part No.
855RR00N	Ranger 4x4 RKS Anger 4x4 SKS Anger 4x4 SKS 4dr B-Ser 4x4 SKS 2dr	M5 M5 M5	3875 3750 4000 4000 4000 4000	13.0 13.0 13.0 13.0 13.0 13.0	F87F-Za	F87E-GA	F87A-5F250-CE F87A-5E212-ED
855RR00A	Ranger 4x4 RKS Ranger 4x4 SKS 2dr I Ranger 4x4 SKS 4dr I B-Ser 4x4 SKS 2dr I B-Series 4x4 RKS	M5 M5 M5 M5 M5 M5 M5	3875 3875 4000 4000 4000 3875 4000	14.3 14.3 14.3 14.3 14.3 14.3			

1998 AIR RESOURCES BOARD SUPPLEMENTAL DATA SHEET

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

Exhaust Engine Family: WFMXT03.0HAA Manufacturer: Ford Motor Company Evap Standard: 50K Useful Life with R/L X Evap Family: WFMXE0105B1E Exhaust Std: Tier 0 _ Tier 1 _ TLEV X_ LEV _ ULEV _ ZEV _ ; EPA Tier 0 __ Tier 1 Vehicle Class(es): PC _ LDT1 _ LDT2 X MDV1 _ MDV2 _ MDV3 _ MDV4 _ MDV5 Single Cert Std for Multi-Class Eng Fam: N/A (specify N/A, LDT1, MDV1, MDV2, MDV3, MDV4) Diesel: 13 CCR 2282 _ or 40 CFR 86.113-90 _ or -94 Exh Cert Fuel(s): Indo X Ph2 _ M85 _ CNG _ LPG _ Other (specify) Fuel Type(s): Dedicated <u>¥</u> Flex-Fuel _ Dual-Fuel _ Gasoline <u>X</u> Diesel _ M85 CNG LNG LPG Other (specify) Hybrid: Type A ___ B ___ C ___, APU Cycle (e.g., Otto, Diesel, Turbine) Engine Config: V-6 Liter (CID): 3.0 (183) Engine: Front X Mid. Rear Drive: FWD RWD X 4WD-FT 4WD-PT X Exhaust ECS & Special Features: SFI/2HO2S/EGR/2TWC/TWC (Use abbreviations per SAE J1930, Sep 91) Catalyst Engine Code Vehicle Models Trans. Type ETW DPA Ignition EGR System (PCM) A-Automatic Part No. Part No. Part No. M-Manual (California) <u>-9D475-</u> -12A650-F87A-5F250-CE F87-AFB F87E-GA 3750 12.4 856SR05A B-Series 4x2 SKS L4 F87A-5E212-ED 3750 12.4 Ranger 4x2 SKS L4 F87E-GA 3875 13.0 F87F-ADB L4 Ranger 4x4 RKL 856RR05N 3875 13.0 Ranger 4x4 RKS L4 Ranger 4x4 SKS 4dr L4 4000 13.0 4000 13.0 Ranger 4x4 SKS 2dr L4 3875 13.0 B-Series 4x4 RKS L4 4000 13.0 B-Ser. 4x4 SKS 4dr L4 4000 13.0 B-Ser. 4x4 SKS 2dr L4 L4 3875* 14.3 Ranger 4x4 RKL 856RR05A 3875 14.3 Ranger 4x4 RKS L4 4000 14.3 Ranger 4x4 SKS 2dr L4 Ranger 4x4 SKS 4dr L4 4000* 14.3 B-Ser.4x4 SKS 4dr L4 4250 14.3 3875 14.3 B-Series 4x4 RKS L4 4000 14.3 B-Ser. 4x4 SKS 2dr L4

^{*} Ford elects to conduct certification tests in the next higher ETW.

1998 AIR RESOURCES BOARD SUPPLEMENTAL DATA SHEET PASSENGER CARS, LIGHT-DUTY TRUCKS AND MEDIUM-DUTY VEHICLES

Manufacturer:	Ford Motor Compan	ıy	Exha	aust En	igine Family: _	WFMXT03.0	IAA
Evap Standard	i: 50K Usefu	I Life with	R/L <u>X</u>	_ Ev	ap Family: <u>W</u>	FMXE0105B1	<u>E</u>
Exhaust Std:	Tier 0 _ Tier 1 _ TL	EV <u>X</u> LEV	ULE	V _ ZI	EV_; EPAT	ier 0 Tier	1
Vehicle Class(es): PC _ LDT1 _	_ LDT2 _	<u>х</u> мр	V1 _ N	IDV2 _ MDV3	B _ MDV4 _ N	MDV5
Single Cert Sto	d for Multi-Class Eng	Fam: <u>N/</u>	A (spe	cify N/A	A, LDT1, MDV	1, MDV2, MD\	√3, MDV4)
Exh Cert Fuel((s): Indo <u>X</u> Ph2 _ M85 _ CNG _ L	Diesel: .PG Oth	13 CCR er (spe	1 2282 _. cify)	_ or 40 CFR	86.113-90 <u> </u>	r -94
Fuel Type(s):	Dedicated 🔏 Flex-F	Fuel Du .PG C	ıal-Fuel Other (sı	Ga becify)	soline <u>X</u> Die	sel _ M85	
Hybrid: Type	ABC, A	PU Cycle	(e.g., O	tto, Die	sel, Turbine)		
Engine Config	: <u>V-6</u> Liter (C	ID): <u>3.0 (</u>	183)				
	X Mid RearI					4WD-PT <u>X</u>	
Exhaust ECS (Use abbrevi	& Special Features: ations per SAE J193	<u>SFI/2HO2</u> 0, Sep 91)	25/EGR)	/2TWC	YWC		
Engine Code	Vehicle Models Tra	ans. Type	ETW	DPA	Ignition (PCM)	EGR System	Catalyst
(California)		Automatic Manual			Part No. -12A650-	Part No. -9D475-	Part No.
855RR05N		M5 M5	3875 3750 4000 4000 4000 4000	13.0 13.0 13.0 13.0 13.0 13.0	F87F-ZB	F87E-GA	F87A-5F250-CE F87A-5E212-ED
855RR05A	Ranger 4x4 RKL Ranger 4x4 RKS Ranger 4x4 SKS 2dr Ranger 4x4 SKS 4dr B-Ser 4x4 SKS 2dr B-Series 4x4 RKS B-Ser 4x4 SKS 4dr	M5 M5 M5 M5 M5 M5 M5	3875 3875 4000 4000 4000 3875 4000	14.3 14.3 14.3 14.3 14.3 14.3			

1998 AIR RESOURCES BOARD SUPPLEMENTAL DATA SHEET

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

Manufacturer	: Ford Motor Company	y	Exha	aust En	gine Family: _	WFMXT03.0F	<u>IAA</u>
Evap Standar	d: 50K Useful	Life with I	R/L <u>X</u>	Ev	ap Family: <u>W</u>	FMXE0105B1	E
Exhaust Std:	Tier 0 Tier 1 TLE	V X_LEV	ULE	≣V _ Z	EV_; EPA	Γier 0 Tier	1
Vehicle Class	(es): PC _ LDT1 _	LDT2_	K MD\	/1 _ M	IDV2 _ MDV3	_ MDV4 _ N	MDV5
Single Cert S	td for Multi-Class Eng l	Fam: <u>N//</u>	<u>\</u> (spec	cify N/A	, LDT1, MDV	1, MDV2, MD\	/3, MDV4)
Exh Cert Fue	l(s): Indo <u>X</u> Ph2 _ M85 _ CNG _ LF	Diesel: 1 PG _ Othe	3 CCR er (spec	.2282 _. cify)	_ or 40 CFR 8	36.113-90 <u> </u>	r -94
Fuel Type(s):	Dedicated ★ Flex-Flex-Flex-Flex-Flex-Flex-Flex-Flex-	uel Dua PG O	al-Fuel ther (sp	_ Gas pecify)	soline X Die	sel M85	
Hybrid: Type	A B C, AP	PU Cycle (e.g., Ot	to, Die	sel, Turbine)		
Engine Config	g: <u>V-6</u> Liter (CI	D): <u>3.0 (1</u>	<u>83)</u>				
_	<u>X</u> Mid Rear D					4WD-PT <u>X</u>	
Exhaust ECS (Use abbrev	& Special Features: <u>S</u> viations per SAE J1930	SFI/2HO2), Sep 9 1)	Z) S/EGR	/2TWC	/TWC		
Engine Code	Vehicle Models Trai	ns. Type utomatic	ETW	DPA	(PCM)	EGR System	Catalyst
(California)		Manual			Part No. -12A650-	Part No. -9D475-	Part No.
856SR15A			3750 3750	12.4 12.4	F87-BSA	F87E-GA	F87A-5F250-CE F87A-5E212-ED
856RR15N	Ranger 4x4 SKS 4dr L Ranger 4x4 SKS 2dr L	_4 3 _4 4 _4 4 _4 3	3875 3875 4000 4000 3875 4000	13.0 13.0 13.0 13.0 13.0 13.0	F87F-BRA	F87E-GA	
8 56 RR15A	Ranger 4x4 RKS L Ranger 4x4 SKS 2dr L Ranger 4x4 SKS 4dr L B-Ser,4x4 SKS 4dr L	L4 3 L4 4 L4 4 L4 4	3875* 3875 4000 4000* 4250 3875 4000	14.3 14.3 14.3 14.3 14.3 14.3			

^{*} Ford elects to conduct certification tests in the next higher ETW.