State of California AIR RESOURCES BOARD

EXECUTIVE ORDER A-10-764 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 Ford Motor Company 1998 model-year exhaust emission control systems are certified as described below for light-duty trucks:

Emission Standard Category: Low-Emission Vehicle (LEV)

Fuel Type: Gasoline

Engine Family: WFMXT03.8AAA <u>Displacement</u>: 3.8 Liters (232 Cubic Inches)

Exhaust Emission Control Systems & Special Features:

Dual Three Way Catalytic Converters 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) LEV certification exhaust emission standards for this engine family in grams per mile are:

Loaded Vehicle Weight (lbs.)	Miles	NMOG	<u></u>	<u>N0x</u>	<u>НСНО</u>	CO (20°F)
3751-5750	50,000	0.100	4.4	0.4	0.018	12.5
	100,000	0.130	5.5	0.5	0.023	n/a

Reactivity Adjustment Factor (RAF) for NMOG Mass Emission: 0.94

The certification exhaust emission values set forth for NMOG reflect application of a 0.94 RAF for 1998 model-year LEVs. The LEV 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	0.096	1.1	0.2	0.002	5.4
	100,000	0.101	1.2	0.2	0.002	n/a

BE IT FURTHER RESOLVED: That the vehicle manufacturer is vertifying 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 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)(6.2) ("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.).

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."

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 //

day of December 1996.

R. B. Summerfield, Chief

Mobile Source Operations Division

E.O.# <u>A-10-76</u>4

1998 MODEL YEAR SUPPLEMENTAL DATA SHEET EXHAUST/EVAPORATIVE SYSTEM & CALIFORNIA REQUIREMENTS PASSENGER CARS, LIGHT-DUTY AND MEDIUM-DUTY TRUCKS

Mfgr. <u>FORD</u>	MOTOR COMPANY	Exh	aust Engi	ne Fam	ily: <u>WFMXTO</u>	3.8AAA	
Engine Code T	ypes: CA <u>X</u> 49S_	50S Eva	p Emissio	ns Fam	ily: <u>WFMXE01</u>	40B1E OK	VR No
	-0 Tier-1						
Evap Std: 50	T Proc Equ K Useful Life	with R/LX	In-Use E	kh Std	Full In Us	e Alt :	In Use <u>X</u>
	7 Plac Pt. : PC LDT1						
Single Cert S	O(Lym. AL) td for Multi-Clas	os Eng Fam: <u>N</u>	<u>/A</u> (spe	ecify:	N/A, LDT1,M	DV1,MDV2,MI	0V3,MDV4)
Exh Cert Fuel	(s): Indo Phi				or 40CFR 86.	113-90 (or -94
Fuel Type(s):	M85 CNO Dedicated :	GLPG Flex Fuel					
	Gasoline X D	iesel M85_	CNG	_ LPG			
Hybrid: Type	A B C	_, APU Cycl	e (eg,	Otto,	Diesel, Turb	oine)	<u> </u>
Valves/Cyl: _	V-Block of Disp 2 t X Mid Rea	Rat	ed HP: _2	00 @	5000 RPM		r
			_				-
Exhaust Contr	ol System and Spe	ecial Features			R, SFI. tions per SA	LE J1930 SE	P91)
Engine Code	Vehicle Models	Trans. Type	ETW	DPA	Ignition	EGR	Catalytic
(also list	(if coded see	A-Automatic	or	or	(ECM/PCM)	System	Converter
CA/49ST/50ST	attachment)	M-Manual	Test Wt	RLHP	Part No.	Part No.	Part No.
862SR00A/N		А			F78F-JA	(alt	F78A-ADD F78A-ADE F78A-ADF
	Windstar RVL (P	215 tire)	3875	10.3		(424	,
	Windstar CWL (P	205 tire)	3875 4250 4250	11.3* 9.7 10.7*			
	(P:	215 tire)		10.3			
			4250	11.3*			
862TR00A/N		A			F78F-KA	7.7	**
	Windstar RVL (P.	215 tire)	3875 3875	10.3 11.3*			
	Windstar CWL (P	205 tire)	4250	9.7			
	(2	215 tire)	4250 4250 4250	10.7* 10.3 11.3*			

ENGINE FAMILY: WFMXT03.8AAA

ISSUED: REVISED: NOV 2 1 1996

^{*} with air conditioning

1998 MODEL YEAR SUPPLEMENTAL DATA SHEET EXHAUST/EVAPORATIVE SYSTEM & CALIFORNIA REQUIREMENTS PASSENGER CARS, LIGHT-DUTY AND MEDIUM-DUTY TRUCKS

Mfgr. FORD M	OTOR COMPANY	Exha	aust Engir	ne Fami	ly: <u>WFMXTO</u>	3.8AAA	
Engine Code Ty	pes: CA <u>X</u> 49S	_ 50S Eva	p Emission	ıs Fami	ly: <u>WFMXE01</u>	10B1E_	
Exh Std: Tier-	0 Tier-1	TLEV LEV_	X_ ULEV_	ZE	V EPA TI	ER-0 T	'IER-1
Evap Std: 50F	Useful Life	with R/L <u>X</u>	In-Use Ex	h Std:	Full In Use	e Alt I	n Use_X
Veh Class(es):	PC LDT1	LDT2_X_ MDV	L MDV2	2	MDV3 MDV	/4 MDV5	i
Single Cert St	d for Multi-Clas	s Eng Fam: <u>N</u>	/ <u>A</u> (spe	cify:	N/A, LDT1,MI	OV1,MDV2,MI	0V3,14DV4)
Exh Cert Fuel	(s): Indo Ph2	X Diesel: 1	L3 CCR 228 Other (spe	2c	r 40CFR 86.1	L13-90 C	or -94
	Dedicated F	lex Fuel I	Dual-Fuel_ CNG	LPG_	Other (s	specify)	
Hybrid: Type	A B C	., APU Cycl	e (eg, (Otto, I	Diesel, Turb	ine)	
Values/Cyl. 3	<u>V-Block</u> Displ 2 <u>X</u> Mid <u>R</u> ea	Rat	ed HP: <u>2</u>	00 <u>@</u>	<u>5000</u> RPM		т
Exhaust Contro	ol System and Spe	cial Features	/TWC./HO2 (Use ab	e g(2) EGF brevia	SFI,	E J1930 SE	P91)
(also list	Vehicle Models (if coded see attachment)	A-Automatic	or		Ignition (ECM/PCM) Part No.	System	Converter
862SR11A/N		A			F78F-JF	(alt	F78A-ADD F78A-ADE F78A-ADF
	Windstar RVL (P2	215 tire)	3875 3875	8.5 9.4*			
	Windstar CWL (P205 tire)		4250 4250	9.1 10.0*			
(P215(SS)tire			4250 4250	7.7 8.5*			
	(551)	5/P225 tire)	4250	8.5 9.4*			
862TR11A/N	Windstar RVL (P	A 215 tire)	3875 3875	8.5 9.4	F78F-KF	n	n
	Windstar CWL (P:	205 tire)	4250 4250	9.1 10.0*			
	(P:	215(SS)tire)	4250 4250	7.7 8.5*			
	(P21	5/P225 tire)	4250 4250	8.5 9.4*			
(ss)tire - Uniroya * with air conditi	l self sealing tire oning						

ENGINE FAMILY: WFMXT03.8AAA

ISSUED

REVISED: DEC 1 9 1996

1998 MODEL YEAR SUPPLEMENTAL DATA SHEET EXHAUST/EVAPORATIVE SYSTEM & CALIFORNIA REQUIREMENTS PASSENGER CARS, LIGHT-DUTY AND MEDIUM-DUTY TRUCKS

Mfgr. <u>FORD N</u>	MOTOR COMPANY	Exh	aust Engir	ne Fami	lly: <u>WFMXTO</u>	3.8AAA	
Engine Code Ty	/pes: CA <u>X</u> 49S	_ 50S Eva	p Emission	ns Fami	ly: WFMXE01	40B1E	
Exh Std: Tier-	-0 Tier-1	TLEVLEV_	X_ ULEV_	ZE	VEPA T	IER-OT	TER-1
Evap Std: 50	Useful Life	with R/L_X_	In-Use Ex	h Std:	Full In Use	a Alt I	n Use <u>X</u>
	: PC LDT1						
Single Cert St	ed for Multi-Clas	s Eng Fam: <u>N</u>	/A (spe	cify:	N/A, LDT1,M	OV1,MDV2,MI)V3,MDV4)
Fuel Type(s):	Dedicated F	G LPG G Flex Fuel Hesel M85	Other (spec Dual-Fuel CNG	ecify) _ LPG_	Other (specify)	
Hybrid: Type	A B C	., APU Cycl	e (eg, (Otto, 1	Diesel, Turb	ine)	
Valves/Cyl: Engine: Fron	t <u>X</u> Mid Rea	Rat ar Dri	ed HP: <u>2</u> ve: Fwd_	00 @ X RW		4WD-P	
Exhaust Contr	ol System and Spe	ecial Features	(Use ab	2S(Z)EGI brevia	tions per SA	E J1930 SE	P91)
(also list	Vehicle Models (if coded see attachment)	Trans. Type A-Automatic M-Manual	or	or	(ECM/PCM)	System	Converter
862SR06A/N		А			F78F-JD	(alt	F78A-ADD) F78A-ADE) F78A-ADF
	Windstar RVL (P	215 tire)	3875 3875	8.5 9.4*			
			4250 4250	9.1 10.0*			
	(P215(SS)tire) (P215/P225 tire)		4250	7.7 8.5* 8.5			
			4250	9.4*			
862TR06A/N	Windstar RVL (P	A 215 tire)	3875 3875	8.5 9.4	F78F-KD	и	n
	Windstar CWL (P	205 tire)	4250 4250	9.1 10.0*			
		215(SS)tire) 5/P225 tire)	4250 4250 4250	7.7 8.5* 8.5			
(ss)tire - Uniroya	al self sealing tire	J, E Z Z J (116)	4250	9.4*			
* with air conditi	ioning						

ENGINE FAMILY: WFMXT03.8AAA

ISSUED:
REVISED: DEC 1 9 1996