

State of California
AIR RESOURCES BOARD

EXECUTIVE ORDER A-10-786
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 medium-duty vehicles:

Fuel Type: Gasoline

Engine Family: WFMXA05.4JBN Displacement: 5.4 Liters (326 Cubic Inches)

Exhaust Emission Control Systems & 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:

<u>Test Weight</u> (lbs.)	<u>Miles</u>	<u>Non-Methane</u> <u>Hydrocarbons</u>	<u>Carbon</u> <u>Monoxide</u>	<u>Nitrogen</u> <u>Oxides</u>	<u>Carbon</u> <u>Monoxide (20°F)</u>
5751-8500	50,000	0.39	5.0	1.1	12.5
	120,000	0.56	7.3	1.53	n/a

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

<u>Test Weight</u> (lbs.)	<u>Miles</u>	<u>Non-Methane</u> <u>Hydrocarbons</u>	<u>Carbon</u> <u>Monoxide</u>	<u>Nitrogen</u> <u>Oxides</u>	<u>Carbon</u> <u>Monoxide (20°F)</u>
5751-8500	50,000	0.14	1.6	0.2	3.2
	120,000	0.17	2.1	0.31	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 medium-duty vehicle phase-in 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" (Title 13, California Code of Regulations, Section 1960.1(h)(2)).

BE IT FURTHER RESOLVED: That under the submitted medium-duty vehicle phase-in compliance plan, if the manufacturer incurs "Vehicle Equivalent Debits" for the aforementioned model year due to the manufacturer's failure to produce and deliver for sale in California the equivalent quantity of medium-duty vehicles certified to low-emission vehicle and/or ultra-low-emission vehicle exhaust emission standards required by the above-referenced standards and test procedures, all "Vehicle Equivalent Debits" incurred 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.).

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 5th day of June 1997.


R. B. Summerfield, Chief
Mobile Source Operations Division

E.O.# A-10-786

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

Mfgr. FORD MOTOR COMPANY Exhaust Engine Family: WFMXA05.4JBN
 Engine Code Types: CA X 49S___ 50S___ Evap Emissions Family: WFMXE0160B0G/BOF
 Exh Std: Tier-0___ Tier-1 X TLEV___ LEV___ ULEV___ ZEV___ EPA TIER-0___ TIER-1___
 Evap Std: 50K___ Useful Life with R/L X ORVR: No
Evap Test Proc. Pt. Source
 Veh Class(es): PC___ LDT1___ LDT2___ MDV1___ MDV2___ MDV3 X MDV4___ MDV5___
 Single Cert Std for Multi-Class Eng Fam: N/A (specify: N/A, LDT1,MDV1,MDV2,MDV3,MDV4)
Service Accum. Mod AMA
 Exh Cert Fuel(s): Indo X Ph2___ Diesel: 13 CCR 2282___ or 40CFR 86.113-90___ or -94___
 M85___ CNG___ LPG___ Other (specify)___
 Fuel Type(s): Dedicated___ Flex Fuel___ Dual-Fuel___
 Gasoline X Diesel___ M85___ CNG___ LPG___ Other (specify)___
 Hybrid: Type A___ B___ C___, APU Cycle (eg., Otto, Diesel, Turbine)___
 Engine Config V-8 Displacement: 5.4L(326) Liters (Cubic Inches)
 Valves/Cyl: 2 Rated HP: 230 @ 4250 RPM
 Engine: Front X Mid___ Rear___ Drive: Fwd___ RWD X 4WD-FT___ 4WD-PT X

Exhaust Control System and Special Features ZTWC(2) 2H02S(2) EGR SFI
 (Use abbreviations per SAE J1930 SEP91)

Engine Code (also list CA/49ST/50ST	Vehicle Models (if coded see 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.
846TR00A/N		A			F85F-VA	F75E-CA	(LH) F85A-DA (RH) F85A-DA
	F150 4X4 SKL		6000	*			
	F250 4X2 RKL		6000				
	F250 4X2 SKS		6000				
	F250 4X4 RKL (7700 GVWR)		6500				
	F250 4X4 RKL (7200 GVWR)		6000				
	F250 4X4 SKS (7700 GVWR)		6500				
	F250 4X4 SKS (7200 GVWR)		6000				
	F250 4X4 SKS (7200 GVWR)		6500 @				

* SEE SECTION 20.09.17.03

@ with air conditioning

1998 MODEL YEAR AIR RESOURCES BOARD SUPPLEMENTAL DATA SHEET Page 1
PASSENGER CARS, LIGHT-DUTY AND MEDIUM-DUTY TRUCKS

Mfgr. FORD MOTOR COMPANY Exh Eng Fam: WFMXA05.4JBN Evap Fam: WFMXE0160B0G/B0F
 All Engine Codes in Engine Family: CA X 49S ___ 50S ___ AB965 ___ ORVR: Yes ___ No X
 Exh Std: CA Tier-1 X , TLEV ___ , LEV ___ , ULEV ___ , SULEV ___ , EPA TIER-1 ___
 Veh Class(es): PC ___ LDT1 ___ LDT2 ___ MDV1 ___ MDV2 ___ MDV3 X MDV4 ___ MDV5 ___
 Single Cert Std for Multi-Class Eng Fam: N/A (specify: N/A, LDT1,MDV1,MDV2,MDV3,MDV4)
 Fuel Type(s): Dedicated X Flex Fuel ___ Dual-Fuel ___ Bi-Fuel ___
 Gasoline X Diesel ___ M85 ___ CNG ___ LPG ___ Other (specify) ___
 Exh Emiss Test Fuel(s): Indo X CBG ___ CNG ___ LPG ___ M85 ___ Other (specify) ___
 Diesel: 13 CCR 2282 ___ or 40CFR 86.113-90 ___ or -94 ___
 Evaporative Emission Test Procedure: California ___ Federal X
 Service Accumulation: Std AMA ___ Mod AMA X Mfr. ADP ___ Other (Specify) ___
 NMOG Test Procedure: N/A ___ Std X Equiv ___ R/L Test Procedure: SHED ___ Pt Source X
 Engine Configuration: V-8 Displacement: 5.4L (326) Liters (Cubic Inches)
 Valves/Cyl: 2 Rated HP: 230 @ 4250 RPM
 Engine: Front X Mid ___ Rear ___ Drive: FWD ___ RWD X 4WD-FT ___ 4WD-PT X
 Exhaust Control System and Special Features: 2TWC(2), 2HO2S(2), EGR, SFI
 (Use abbreviations per SAE J1930 JUN93)

Engine Code (also list CA/49ST/50ST)	Vehicle Models (if coded see attachment)	Trans. Type A4-Automatic M5-Manual	ETW or Test Wt	DPA or RLHP	Ignition (ECM/PCM) Part No.	EGR System Part No.	Catalytic Converter Part No.
--	--	--	----------------------	-------------------	-----------------------------------	---------------------------	------------------------------------

846TR10A/N		A4			F85F-VC	F75E-CA (LH)	F85A-DA (RH) F85A-DA
	F150 4X4 SKL		6000	*			
	F250 4X2 RKL		6000				
	F250 4X2 SKS		6000				
	F250 4X4 RKL (7200 GVWR)		6000				
	F250 4X4 RKL (7700 GVWR)		6500				
	F250 4X4 SKS (7200 GVWR)		6000				
	F250 4X4 SKS (7700 GVWR)		6500				
	F250 4X4 SKS (7200 GVWR)		6500 @				

* SEE SECTION 20.09.17.03

2 WITH AIR CONDITIONING

ENGINE FAMILY: WFMXA05.4JBN
ISSUED: 9-26-97
REVISED:

20.09.17.02 - 4

R/C - 19

Supplemental Data Sheet DPA Summary

1998 TRUCK DPA CHART

VEHICLE LINE	ETW	< --- NON - AC --- >				< --- A C --- >			
		CDT	CODE	DPA	TRLHP (HP)	CDT	CODE	DPA	TRLHP (HP)
		% = LVW/ALVW (BOTH)		% = ALVW					
F-150 4x4 (LD)	5000	13.63	(R)	16.0	22.61	12.84	(R)	17.4	24.00
(PN96)	5250	14.04	(R)	16.0	23.05	13.26	(R)	17.4	24.41
AUTO TRANS (E40D)	\$ 5500	14.44	(R)	16.0	23.48	13.68	(R)	17.4	24.78
P235/70R16 TIRE									
F-150 4x4 (LD)	5000	13.10	(R)	15.5	23.53	12.48	(R)	16.9	24.70
(PN96)	5250	13.76	(R)	15.5	23.52	12.98	(R)	16.9	24.93
AUTO TRANS (E40D)	\$ 5500	14.42	(R)	15.5	23.51	13.48	(R)	16.9	25.15
P255/70R16 TIRE A/S									
F-150 4x4 (LD)	5000	13.05	(R)	16.2	23.62	12.31	(R)	17.6	25.04
(PN96)	5250	13.59	(R)	16.2	23.81	12.84	(R)	17.6	25.20
AUTO TRANS (E40D)	\$ 5500	14.12	(R)	16.2	24.01	13.36	(R)	17.6	25.38
P255/70R16 TIRE A/T	6000	15.19	(R)	16.2	24.35	14.41	(R)	17.6	25.67
F-150 4x4 (LD)	5000	13.02	(R)	15.2	23.67	12.08	(R)	16.6	25.51
(PN96)	5250	13.55	(R)	15.2	23.88	12.80	(R)	16.6	25.28
AUTO TRANS (E40D)	\$ 5500	14.08	(R)	15.2	24.08	13.52	(R)	16.6	25.08
P265/70R17 TIRE A/T									
F-150 4x4 (LD)	4750	11.83	(R)	14.3	24.75	11.18	(R)	15.7	26.19
(PN96)	5000	12.37	(R)	14.3	24.92	11.70	(R)	15.7	26.34
AUTO TRANS	% 5250	12.90	(R)	14.3	25.09	12.20	(R)	15.7	26.53
LT245/75R16 A/T TIRE	\$ 5500	13.43	(R)	14.3	25.24	12.71	(R)	15.7	26.67
F-250 4X2 (LD)	5000	15.56	(R)	13.2	19.81	14.58	(R)	14.5	21.14
(PN102)	5250	16.06	(R)	13.2	20.15	15.06	(R)	14.5	21.48
MANUAL OR AUTO E40D TRANS	5500	16.55	(C)	13.2	20.48	15.55	(C)	14.5	21.80
(GAS or NGV)	\$ 6000	17.54	(C)	13.2	21.09	16.52	(C)	14.5	22.39
	\$ 6500	18.53	(C)	13.2	21.62	17.49	(C)	14.5	22.91
F-250 4X4 (LD)	5000	13.93	(R)	14.8	22.13	13.17	(R)	16.2	23.40
(PN102)	5250	14.38	(R)	14.8	22.50	13.59	(R)	16.2	23.81
MANUAL OR AUTO E40D TRANS	5500	14.82	(C)	14.8	22.88	14.01	(C)	16.2	24.20
	\$ 6000	15.71	(C)	14.8	23.54	14.85	(C)	16.2	24.91
	\$ 6500	16.60	(C)	14.8	24.14	15.69	(C)	16.2	25.54