

State of California  
AIR RESOURCES BOARD

EXECUTIVE ORDER A-10-783  
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: WFXA05.4JBP Displacement: 5.4 Liters (326 Cubic Inches)

Exhaust Emission Control Systems & Special Features:

Three Way Catalytic Converter  
Dual Heated Oxygen Sensors  
Heated Oxygen Sensor  
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 (lbs.)</u>	<u>Miles</u>	<u>Non-Methane Hydrocarbons</u>	<u>Carbon Monoxide</u>	<u>Nitrogen Oxides</u>	<u>Carbon 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 (lbs.)</u>	<u>Miles</u>	<u>Non-Methane Hydrocarbons</u>	<u>Carbon Monoxide</u>	<u>Nitrogen Oxides</u>	<u>Carbon Monoxide (20°F)</u>
5751-8500	50,000	0.22	1.9	0.6	5.3
	120,000	0.30	2.4	0.65	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).

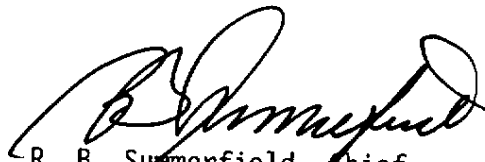
BE IT FURTHER RESOLVED: That the manufacturer is certifying the listed vehicle models with a partially complying on-board diagnostic system for the aforementioned model year pursuant to Title 13, California Code of Regulations, Section 1968.1(m)(6.2) ("Malfunction and Diagnostic System Requirements--1994 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 4th day of August 1997.



R. B. Summerfield, Chief  
Mobile Source Operations Division

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: WFMXA05.4JBP(WA5.4JBP) Evap Fam: WFMXEO155BOG  
 All Engine Codes in Engine Family: CA X 49S \_\_\_ 50S \_\_\_ AB965 \_\_\_ ORVR: Yes \_\_\_ No XXX  
 Exh Std: CA Tier-1 X, TLEV \_\_\_ , LEV \_\_\_ , ULEV \_\_\_ , SULEV \_\_\_ , EPA TIER-1 \_\_\_  
NMOG Test Proc N/A  
 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 \_\_\_ CBG X CNG \_\_\_ LPG \_\_\_ M85 \_\_\_ Other (specify) \_\_\_  
 Diesel: 13 CCR 2282 \_\_\_ or 40CFR 86.113-90 \_\_\_ or -94 \_\_\_  
 Evaporative Emission Test Procedure: California X Federal \_\_\_  
 Service Accumulation: Std AMA \_\_\_ Mod AMA X Mfr. ADP \_\_\_ Other (Specify) \_\_\_  
 NMOG Test Procedure: N/A X Std \_\_\_ 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: 235 @ 4250 RPM  
 Engine: Front X Mid \_\_\_ Rear \_\_\_ Drive: FWD \_\_\_ RWD X 4WD-FT \_\_\_ 4WD-PT \_\_\_  
 Exhaust Control System and Special Features: TWC, HO2S, EGR, SFI, 2HO2S  
 (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.
846QR00N	E150 CWL 2WD	A4	6000	*	F8UF-TA	F7UE-AA	F7UA-KA
846QR00A	E150 CWL 2WD	A4	6500				
846QR00N	E150 RVL 2WD	A4	6000				
846QR00A	E150 RVL 2WD	A4	6000				
846QR00N	E250 RVL 2WD	A4	6000				
846QR00N	E250 RVL 2WD	A4	7000				
846QR00N	E250 RVL 2WD	A4	6500				
846QR00A	E250 RVL 2WD	A4	6500				
846QR00N	E250 RVL 2WD	A4	7000				
846QR00N	E250 SVL 2WD	A4	6500				
846QR00N	E250 SVL 2WD	A4	7000				
846QR00A	E250 SVL 2WD	A4	6500				
846QR00A	E250 SVL 2WD	A4	7000				
846QR00A	E250 SVL 2WD	A4	6500				
874UR00N	E350 CWL 2WD	A4	7500		F8UF-YA		
874VR00N	E350 CWL 2WD	A4	7500		F8UF-ZA		
874UR00A	E250 CWL 2WD	A4	7500		F8UF-YA		
874VR00A	E250 CWL 2WD	A4	7500		F8UF-ZA		
874UR00N	E350 RVL 2WD	A4	7500		F8UF-YA		
874VR00N	E350 RVL 2WD	A4	7500		F8UF-ZA		

\* See page 20.09.17.02-3 for DPA values.

Engine Family: WA5.4JBP

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Issue Date: JUN 23 1997  
Revised:

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

(Continued)

Mfgr. FORD MOTOR COMPANY Exh Eng Fam: WFMXA05.4HBC(WA5.4HBC) Evap Fam: WFMXE0160BOF

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.
874UR00A	E350 RVL 2WD	A4	7500	*	F8UF-YA	F7UE-AA	F7UA-KA
874VR00A	E350 RVL 2WD	A4	7500		F8UF-ZA		
874UR00N	E350 SVL 2WD	A4	7500		F8UF-YA		
874VR00N	E350 SVL 2WD	A4	7500		F8UF-ZA		
874UR00A	E350 SVL 2WD	A4	7500		F8UF-YA		
874VR00A	E350 SVL 2WD	A4	7500		F8UF-ZA		
874UR00N	E350 SW-10-P 2WD	A4	7500		F8UF-YA		
874VR00N	E350 SW-10-P 2WD	A4	7500		F8UF-ZA		
874UR00A	E350 SW-10-P 2WD	A4	7500		F8UF-YA		
874VR00A	E350 SW-10-P 2WD	A4	7500		F8UF-ZA		
874UR00N	E350 SW-12-P 2WD	A4	7500		F8UF-YA		
874VR00N	E350 SW-12-P 2WD	A4	7500		F8UF-ZA		
874UR00A	E350 SW-12-P 2WD	A4	7500		F8UF-YA		
874VR00A	E350 SW-12-P 2WD	A4	7500		F8UF-ZA		
874UR00N	E350 SW-15-P 2WD	A4	7500		F8UF-YA		
874VR00N	E350 SW-15-P 2WD	A4	7500		F8UF-ZA		
874UR00A	E350 SW-15-P 2WD	A4	7500		F8UF-YA		
874VR00A	E350 SW-15-P 2WD	A4	7500		F8UF-ZA		

\* See page 20.09.17.02-3 for DPA values.

Engine Family: WA5.4JBPIssue Date: JUN 23 1997  
Revised:

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1998 MODEL YEAR AIR RESOURCES BOARD SUPPLEMENTAL DATA SHEET Page 4  
PASSENGER CARS, LIGHT-DUTY AND MEDIUM-DUTY TRUCKS

(Continued)

Mfg. FORD MOTOR COMPANY Exh Eng Fam: WFMKA05.4HBC (WA5.4HBC) Evap Fam: WFMXE016BOF

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.
846QR05N	E150 CWL 2WD	A4	6000	*	F8UF-TB	F7UE-AA	F7UA-KA
846QR05A	E150 CWL 2WD	A4	6500				
846QR05N	E150 RVL 2WD	A4	6000				
846QR05A	E150 RVL 2WD	A4	6000				
846QR05N	E250 RVL 2WD	A4	6000				
846QR05N	E250 RVL 2WD	A4	7000				
846QR05N	E250 RVL 2WD	A4	6500				
846QR05A	E250 RVL 2WD	A4	6500				
846QR05A	E250 RVL 2WD	A4	7000				
846QR05N	E250 SVL 2WD	A4	6500				
846QR05N	E250 SVL 2WD	A4	7000				
846QR05A	E250 SVL 2WD	A4	6500				
846QR05A	E250 SVL 2WD	A4	7000				
846QR05A	E250 SVL 2WD	A4	6500				
874UR05N	E350 CWL 2WD	A4	7500		F8UF-YB		
874VR05N	E350 CWL 2WD	A4	7500		F8UF-ZB		
874UR05A	E250 CWL 2WD	A4	7500		F8UF-YB		
874VR05A	E250 CWL 2WD	A4	7500		F8UF-ZB		
874UR05N	E350 RVL 2WD	A4	7500		F8UF-YB		
874VR05N	E350 RVL 2WD	A4	7500		F8UF-ZB		
874UR05A	E350 RVL 2WD	A4	7500		F8UF-YB		
874VR05A	E350 RVL 2WD	A4	7500		F8UF-ZB		
874UR05N	E350 SVL 2WD	A4	7500		F8UF-YB		
874VR05N	E350 SVL 2WD	A4	7500		F8UF-ZB		
874UR05A	E350 SVL 2WD	A4	7500		F8UF-YB		
874VR05A	E350 SVL 2WD	A4	7500		F8UF-ZB		
874UR05N	E350 SW-10-P 2WD	A4	7500		F8UF-YB		
874VR05N	E350 SW-10-P 2WD	A4	7500		F8UF-ZB		
874UR05A	E350 SW-10-P 2WD	A4	7500		F8UF-YB		
874VR05A	E350 SW-10-P 2WD	A4	7500		F8UF-ZB		
874UR05N	E350 SW-12-P 2WD	A4	7500		F8UF-YB		
874VR05N	E350 SW-12-P 2WD	A4	7500		F8UF-ZB		
874UR05A	E350 SW-12-P 2WD	A4	7500		F8UF-YB		
874VR05A	E350 SW-12-P 2WD	A4	7500		F8UF-ZB		
874UR05N	E350 SW-15-P 2WD	A4	7500		F8UF-YB		
874VR05N	E350 SW-15-P 2WD	A4	7500		F8UF-ZB		
874UR05A	E350 SW-15-P 2WD	A4	7500		F8UF-YB		
874VR05A	E350 SW-15-P 2WD	A4	7500		F8UF-ZB		

\* See page 20.09.17.02-3 for DPA values.

Engine Family: WA5.4JBPIssue Date: AUG 08 1997  
Revised:

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SUPPLEMENTAL DATA SHEET

EO#A-10-783

EO#A-10-783

SUPPLEMENTAL DATA SHEET 1998 TRUCK DPA CHART

VEHICLE LINE	ETW	NON-AC		CDT		TRUMP (HP)		CDT		A/C		Ambient Dyno Coefficients		Track Force Coefficients	
		CDT	CODE	DPA	TRUMP (HP)	CDT	CODE	DPA	TRUMP (HP)	A	B	C	F0	F2	
		% = LVW/ALVW (BOTH)		% = LVW/ALVW											
E-SERIES (VW127) - (LD)															
ECONOLINE E-160 VAN/CLUB WAGON	5260	16.66	(A)	13.7	20.68	14.88	(A)	16.1	22.04					48.78	0.04318
5.4L	8000	16.38	(A)	13.7	20.72	15.35	(A)	16.1	22.09					47.84	0.04328
E40D	8000	17.25	(A)	13.7	21.44	16.21	(A)	16.1	22.82					52.82	0.04362
	8500	16.80	(A)	14.8	21.88	16.89	(A)	16.0	23.28					55.47	0.04380
	8500	17.89	(A)	14.3	22.27	16.93	(A)	16.7	23.87					57.88	0.04387
E-4L/E40D	8500	14.88	(A)	16.8	23.09	13.84	(A)	17.2	24.50					54.88	0.04747
LT226/76R16 A/S "D" or "E" TIRE	8600	16.74	(A)	15.9	23.94	15.81	(A)	17.3	25.34					61.68	0.04721
E-4L/E40D	8000	16.17	(A)	14.8	22.87	16.24	(A)	16.0	24.27					56.49	0.04648
LT226/76R16 A/S "D" or "E" TIRE	8600	16.88	(A)	14.8	23.72	15.85	(A)	16.2	26.12					62.35	0.04627
E-SERIES (VW127) - (MD)															
ECON. E-260 REGULAR VAN	7000	17.78	(A)	16.6	24.32	16.78	(A)	17.0	25.72					64.20	0.04728
LT226/76R16 A/S "E" TIRE	7000	17.80	(A)	16.6	24.11	16.92	(A)	17.8	25.50					65.08	0.04635
ECON. E-260 SUPER VAN	7000	17.80	(A)	16.6	24.11	16.92	(A)	17.8	25.50					65.08	0.04635
E-4L/E40D	7000	17.80	(A)	16.6	24.11	16.92	(A)	17.8	25.50					65.08	0.04635
LT226/76R16 A/S "E" TIRE	7000	17.80	(A)	16.6	24.11	16.92	(A)	17.8	25.50					65.08	0.04635
ECONOLINE E-350	7500	18.02	(A)	17.4	25.68	17.08	(A)	18.8	27.07					76.33	0.04652
5.4/8 BL REGULAR VAN E40D TRANS															
LT246/76R16 A/S TIRE	7500	18.00	(A)	16.2	25.68	17.07	(A)	17.6	27.08					76.49	0.04653
ECONOLINE E-350	7500	18.00	(A)	16.2	25.68	17.07	(A)	17.6	27.08					76.49	0.04653
5.4L COMMUTER VAN E40D TRANS															
LT246/76R16 A/S TIRE	7500	18.24	(A)	16.3	26.35	17.29	(A)	17.7	26.74					76.40	0.04654
ECONOLINE E-350	7500	18.24	(A)	16.3	26.35	17.29	(A)	17.7	26.74					76.40	0.04654
5.4/8 BL SUPER VAN E40D TRANS															
LT246/76R16 A/S TIRE	7500	18.10	(A)	16.1	25.84	17.16	(A)	17.5	26.94					76.55	0.04647
ECONOLINE E-350	7500	18.10	(A)	16.1	25.84	17.16	(A)	17.5	26.94					76.55	0.04647
5.4/8 BL CLUB WAGON E40D TRANS															
LT226/76R16 A/S TIRE	7500	17.88	(A)	15.6	25.71	17.05	(A)	17.0	27.12					79.07	0.04658
LT246/76R16 A/S TIRE	8000	18.11	(A)	15.3	25.81	18.13	(A)	16.7	27.20					79.64	0.04692
ECONOLINE E-350	8000	18.11	(A)	15.3	25.81	18.13	(A)	16.7	27.20					79.64	0.04692
5.4/8 BL SUPER WAGON E40D TRANS															
LT246/76R16 A/S TIRE	8000	18.11	(A)	15.3	25.81	18.13	(A)	16.7	27.20					79.64	0.04692
ECONOLINE E-350	8000	18.11	(A)	15.3	25.81	18.13	(A)	16.7	27.20					79.64	0.04692

Engine Family: WA5 4JBP

Issue Date: 2 3 1997