

State of California  
AIR RESOURCES BOARD

EXECUTIVE ORDER A-10-759  
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: Low-Emission Vehicle (LEV)

Fuel Type (Certification Fuel): Gasoline (Indolene)

Engine Family: WFMXT04.0EAA Displacement: 4.0 Liters (244 Cubic Inches)

Exhaust Emission Control Systems & Special Features:

Dual Three Way Catalytic Converters  
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 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:

<u>Loaded Vehicle Weight (lbs.)</u>	<u>Miles</u>	<u>NMOG</u>	<u>CO</u>	<u>NOx</u>	<u>HCHO</u>	<u>CO (20°F)</u>
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

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

<u>Loaded Vehicle Weight (lbs.)</u>	<u>Miles</u>	<u>NMOG</u>	<u>CO</u>	<u>NOx</u>	<u>HCHO</u>	<u>CO (20°F)</u>
3751-5750	50,000	0.043	1.0	0.1	0.001	3.4
	100,000	0.053	1.5	0.2	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 29<sup>th</sup> day of July 1997.



R. B. Summerfield, Chief  
Mobile Source Operations Division

**1997 AIR RESOURCES BOARD SUPPLEMENTAL DATA SHEET**  
**PASSENGER CARS, LIGHT-DUTY TRUCKS AND MEDIUM-DUTY VEHICLES**

Manufacturer: Ford Motor Company Exhaust Engine Family: WFMXT04.0EAA  
 Evap Standard: 50K \_\_\_ Useful Life with R/L X Evap Family: WFMXE0105B1E  
 Exhaust Std: Tier 0 \_\_\_ Tier 1 \_\_\_ TLEV \_\_\_ LEV X 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)  
 Exh Cert Fuel(s): Indo X Ph2 \_\_\_ Diesel: 13 CCR 2282 \_\_\_ or 40 CFR 86.113-90 \_\_\_ or -94 \_\_\_  
 M85 \_\_\_ CNG \_\_\_ LPG \_\_\_ Other (specify) \_\_\_\_\_  
 Fuel Type(s): Dedicated X Flex-Fuel \_\_\_ Dual-Fuel \_\_\_ Gasoline X 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): 4.0 (244.1)  
 Engine: Front X Mid \_\_\_ Rear \_\_\_ Drive: FWD \_\_\_ RWD X 4WD-FT \_\_\_ 4WD-PT \_\_\_  
 Exhaust ECS & Special Features: SFI/2HO2S/EGR/TWC(2)/<sup>(2)</sup>TWC  
 (Use abbreviations per SAE J1930, Sep 91)

Engine Code (California)	Vehicle Models	Trans. Type A-Automatic M-Manual	ETW	DPA	Ignition	EGR	Catalyst
					(PCM) Part No.	System Part No.	Part No.
858TR00N	Ranger 4x4 RKL	L5	4000	13.0	<del>-12A650-</del> F87F-APA	<del>-9D475-</del> F87E-AA	F87A-5F250-BD
	Ranger 4x4 RKS	L5	3875	13.0			F87A-5E212-DB
	Ranger 4X4 2drSKS	L5	4000	13.0			
	Mazda 4x4 RKL	L5	3875*	13.0			
	Mazda 4x4 2drSKS	L5	4000*	13.0			
858TR00A	Ranger 4x4 RKL	L5	4000	14.3			
	Ranger 4x4 RKS	L5	4000	14.3			
	Ranger 4X4 2drSKS	L5	4250	14.3			
	Ranger 4X2 2drSKS	L5	3750	12.4			
	Mazda 4x4 RKS	L5	4000	14.3			
	Mazda 4X4 2drSKS	L5	4250	14.3			
	Mazda 4X2 2drSKS	L5	3750*	12.4			

\* 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 Exhaust Engine Family: WFMXT04.0EAA  
 Evap Standard: 50K  Useful Life with R/L  Evap Family: WFMXE0105B1E  
 Exhaust Std: Tier 0  Tier 1  TLEV  LEV  ULEV  ZEV ; EPA Tier 0  Tier 1   
 Vehicle Class(es): PC  LDT1  LDT2  MDV1  MDV2  MDV3  MDV4  MDV5   
 Single Cert Std for Multi-Class Eng Fam: N/A (specify N/A, LDT1, MDV1, MDV2, MDV3, MDV4)  
 Exh Cert Fuel(s): Indo  Ph2  Diesel: 13 CCR 2282  or 40 CFR 86.113-90  or -94   
 M85  CNG  LPG  Other (specify) \_\_\_\_\_  
 Fuel Type(s): Dedicated  Flex-Fuel  Dual-Fuel  Gasoline  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): 4.0 (244.1)  
 Engine: Front  Mid  Rear  Drive: FWD  RWD  4WD-FT  4WD-PT   
 Exhaust ECS & Special Features: SFI/2HO<sup>(2)</sup>/EGR/TWC(2)/2TWC  
 (Use abbreviations per SAE J1930, Sep 91)

Engine Code (California)	Vehicle Models	Trans. Type A-Automatic M-Manual	ETW	DPA	Ignition	EGR	Catalyst
					(PCM) Part No.	System Part No.	Part No.
858TR06N	Ranger 4x4 RKL	L5	4000	13.0	<del>12A650-</del> F87F-APC	<del>9D475-</del> F87E-AA	F87A-5F250-BD
	Ranger 4x4 RKS	L5	3875	13.0			F87A-5E212-DB
	Ranger 4X4 2drSKS	L5	4000	13.0			
	Mazda 4x4 RKL	L5	3875*	13.0			
	Mazda 4x4 2drSKS	L5	4000*	13.0			
858TR06A	Ranger 4x4 RKL	L5	4000	14.3			
	Ranger 4x4 RKS	L5	4000	14.3			
	Ranger 4X4 2drSKS	L5	4250	14.3			
	Ranger 4X2 2drSKS	L5	3750	12.4			
	Mazda 4x4 RKS	L5	4000	14.3			
	Mazda 4X4 2drSKS	L5	4250	14.3			
	Mazda 4X2 2drSKS	L5	3750*	12.4			

\* Ford elects to conduct certification tests in the next higher ETW.