

State of California
AIR RESOURCES BOARD

EXECUTIVE ORDER A-10-758
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: WFMXT04.0DAA 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) TLEV 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	0.160	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:

<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	0.044	0.9	0.1	0.001	2.1
	100,000	0.054	1.4	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 27th day of July 1997.



R. B. Summerfield, Chief
Mobile Source Operations Division

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

Manufacturer: Ford Motor Company Exhaust Engine Family: WFMXT04.0DAA

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 X 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 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: SEI/2HO2S/EGR/TWC(2) / 2 TWC
(Use abbreviations per SAE J1930, Sep 91)

Engine Code (California)	Vehicle Models	Trans. Type A-Automatic M-Manual	ETW	DPA	Ignition (PCM) Part No. <u>-12A650-</u>	EGR System Part No. <u>-9D475-</u>	Catalyst Part No.
857TR00N	Ranger 4x4 RKL	M4	3875*	11.3	F87F-AKA	F87E-AA	F87A-5F250-BD F87A-5E212-DB
	Ranger 4x4 RKS	M4	3875	11.3			
	Ranger 4X4 2drSKS	M4	4000	11.3			
	Mazda 4x4 RKS	M4	3875	11.3			
	Mazda 4x4 2drSKS	M4	4000	11.3			
857TR00A	Ranger 4x4 RKL	M4	4000	14.3			
	Ranger 4x4 RKS	M4	3875	14.3			
	Ranger 4X4 2drSKS	M4	4000	14.3			
	Mazda 4x4 RKS	M4	3875*	14.3			
	Mazda 4X4 2drSKS	M4	4000*	14.3			

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

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

Manufacturer: Ford Motor Company Exhaust Engine Family: WFMXT04.0DAA

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/2HO2S/EGR/TWC(2)/2TWC
(Use abbreviations per SAE J1930, Sep 91)

Engine Code	Vehicle Models	Trans. Type	ETW	DPA	Ignition (PCM) Part No.	EGR System Part No.	Catalyst Part No.
(California)		A-Automatic M-Manual			-12A650-	-9D475-	
857TR05N	Ranger 4x4 RKL	M4	3875*	11.3	F87F-AKB	F87E-AA	F87A-5F250-BD
	Ranger 4x4 RKS	M4	3875	11.3			F87A-5E212-DB
	Ranger 4X4 2drSKS	M4	4000	11.3			
	Mazda 4x4 RKS	M4	3875	11.3			
	Mazda 4x4 2drSKS	M4	4000	11.3			
857TR05A	Ranger 4x4 RKL	M4	4000	14.3			
	Ranger 4x4 RKS	M4	3875	14.3			
	Ranger 4X4 2drSKS	M4	4000	14.3			
	Mazda 4x4 RKS	M4	3875*	14.3			
	Mazda 4X4 2drSKS	M4	4000*	14.3			
857TR10N	Ranger 4x4 RKL	M4	3875*	11.3	F87F-AKC	F87E-AA	F87A-5F250-BD
	Ranger 4x4 RKS	M4	3875	11.3			F87A-5E212-DB
	Ranger 4X4 2drSKS	M4	4000	11.3			
	Mazda 4x4 RKS	M4	3875	11.3			
	Mazda 4x4 2drSKS	M4	4000	11.3			
857TR10A	Ranger 4x4 RKL	M4	4000	14.3			
	Ranger 4x4 RKS	M4	3875	14.3			
	Ranger 4X4 2drSKS	M4	4000	14.3			
	Mazda 4x4 RKS	M4	3875*	14.3			
	Mazda 4X4 2drSKS	M4	4000*	14.3			

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