

State of California
AIR RESOURCES BOARD

EXECUTIVE ORDER A-10-756
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: WFMXT04.0AAA 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>
0-3750	50,000	0.125	3.4	0.4	0.015	10.0
	100,000	0.156	4.2	0.6	0.018	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>
0-3750	50,000	0.045	1.1	0.1	0.001	3.5
	100,000	0.055	1.6	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.

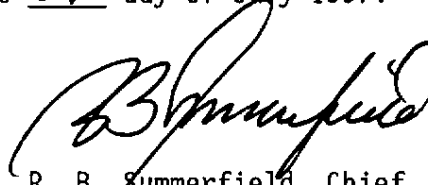
BE IT FURTHER RESOLVED: That the vehicle manufacturer has demonstrated compliance with the exhaust emission standards at 50 degrees Fahrenheit as stipulated in "California Exhaust Emission Standards and Test Procedures for 1988 and Subsequent Model Passenger Cars, Light-Duty Trucks, and Medium-Duty Vehicles."

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 29th 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: WFMXT04.0AAA

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

Engine Code (California)	Vehicle Models	Trans. Type	ETW	DPA	Ignition (PCM) Part No. -12A650-	EGR System Part No. -9D475-	Catalyst Part No.
		A-Automatic M-Manual					
857SR00N	Ranger 4x2 RKL	M4	3500*	11.3	F87F-AJA	F87E-AA	F87A-5F250-BD F87A-5E212-DB
	Ranger 4x2 RKS	M4	3500	11.3			
	Ranger 4X2 2drSKS	M4	3750	11.3			
	Mazda 4x2 RKS	M4	3500	11.3			
	Mazda 4x2 2drSKS	M4	3750	11.3			
857SR00A	Ranger 4x2 RKL	M4	3625	12.4	F87F-ANA		
	Ranger 4x2 RKS	M4	3500	12.4			
	Ranger 4X2 2drSKS	M4	3750	12.4			
	Mazda 4x2 RKS	M4	3500*	12.4			
	Mazda 4X2 2drSKS	M4	3750	12.4			
858SR00A	Ranger 4x2 RKS	L5	3625	12.4			
858SR00N	Ranger 4x2 2drSKS	L5	3750	11.3			
	Mazda 4x2 RKS	L5	3750	11.3			

* 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: WFMXT04.0AAA
 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)/27WC
 (Use abbreviations per SAE J1930, Sep 91)

Engine Code (California)	Vehicle Models	Trans. Type		ETW	DPA	Ignition (PCM) Part No.	EGR System Part No.	Catalyst Part No.
		A-Automatic	M-Manual					
857SR05N	Ranger 4x2 RKL	M4		3500*	11.3	F87F-AJB -12A650-	F87E-AA -9D475-	F87A-5F250-BD F87A-5E212-DB
	Ranger 4x2 RKS	M4		3500	11.3			
	Ranger 4X2 2drSKS	M4		3750	11.3			
	Mazda 4x2 RKS	M4		3500	11.3			
	Mazda 4x2 2drSKS	M4		3750	11.3			
857SR05A	Ranger 4x2 RKL	M4		3625	12.4			
	Ranger 4x2 RKS	M4		3500	12.4			
	Ranger 4X2 2drSKS	M4		3750	12.4			
	Mazda 4x2 RKS	M4		3500*	12.4			
	Mazda 4X2 2drSKS	M4		3750	12.4			
858SR05A	Ranger 4x2 RKS	L5		3625	12.4	F87F-ANB		
858SR05N	Ranger 4x2 2drSKS	L5		3750	11.3			
	Mazda 4x2 RKS	L5		3750	11.3			

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

Manufacturer: Ford Motor Company Exhaust Engine Family: WFMXT04.0AAA
 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: SFI/2HO2S/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 (PCM) Part No. -12A650-	EGR System Part No. -9D475-	Catalyst Part No.
858SR06A	Ranger 4x2 RKS	L5	3625	12.4	F87F-ANC		
858SR06N	Ranger 4x2 2drSKS	L5	3750	11.3			
	Mazda 4x2 RKS	L5	3750	11.3			
857SR10N	Ranger 4x2 RKL	M4	3500*	11.3	F87F-AJC	F87E-AA	F87A-5F250-BD
	Ranger 4x2 RKS	M4	3500	11.3			F87A-5E212-DB
	Ranger 4X2 2drSKS	M4	3750	11.3			
	Mazda 4x2 RKS	M4	3500	11.3			
	Mazda 4x2 2drSKS	M4	3750	11.3			
857SR10A	Ranger 4x2 RKL	M4	3625	12.4			
	Ranger 4x2 RKS	M4	3500	12.4			
	Ranger 4X2 2drSKS	M4	3750	12.4			
	Mazda 4x2 RKS	M4	3500*	12.4			
	Mazda 4X2 2drSKS	M4	3750	12.4			

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