

State of California
AIR RESOURCES BOARD

EXECUTIVE ORDER A-10-649
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 1996 model-year Ford Motor Company exhaust emission control systems are certified as described below for passenger cars:

Fuel Type: Gasoline

Engine Family: TFM4.6VJGFFK Displacement: 4.6 Liters (280 Cubic Inches)

Exhaust Emission Control Systems and Special Features:

- Dual Three Way Catalytic Converters
- Three Way Catalytic Converter
- Dual Heated Oxygen Sensors (two)
- Exhaust Gas Recirculation
- Secondary Air Injection
- Sequential Multiport Fuel Injection

Vehicle models, transmissions, engine codes and evaporative emission control families are listed on attachments.

The certification exhaust emission standards (in-use compliance standards in parentheses) for this engine family in grams per mile are:

| <u>Miles</u> | <u>Non-Methane Hydrocarbons</u> | <u>Carbon Monoxide</u> | <u>Nitrogen Oxides</u> | <u>Carbon Monoxide (20°F)</u> |
|--------------|---------------------------------|------------------------|------------------------|-------------------------------|
| 50,000 | 0.25 (0.32) | 3.4 (5.2) | 0.4 (0.4) | 10.0 (10.0) |
| 100,000 | 0.31 (n/a) | 4.2 (n/a) | 0.6 (n/a) | n/a |

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

| <u>Miles</u> | <u>Non-Methane Hydrocarbons</u> | <u>Carbon Monoxide</u> | <u>Nitrogen Oxides</u> | <u>Carbon Monoxide (20°F)</u> |
|--------------|---------------------------------|------------------------|------------------------|-------------------------------|
| 50,000 | 0.16 | 1.2 | 0.2 | 8.4 |
| 100,000 | 0.20 | 1.6 | 0.3 | 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 non-methane organic gas (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, based on a separate compliance plan submitted by the vehicle manufacturer, the listed vehicle models are permitted alternative in-use compliance 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 the submitted alternative in-use compliance plan satisfies the requirement that a maximum of 20 percent of the manufacturer's projected sales of 1996 model-year California-certified passenger cars and light-duty trucks will be subject to alternative in-use compliance as stipulated in the above-referenced standards and test procedures.

BE IT FURTHER RESOLVED: That the vehicle manufacturer is certifying the listed vehicle models to the 50,000-mile evaporative emission standards applicable to 1980 through 1994 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, based on the evaporative emission phase-in compliance schedule submitted by the vehicle manufacturer, the listed vehicle models shall not be subject to the running loss and useful life standards set forth in the "California Evaporative Emission Standards and Test Procedures for 1978 and Subsequent Model Motor Vehicles."

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 "California Motor Vehicle Emission Control 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 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 "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 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 20th day of July 1995.


R. B. Summerfield
Assistant Division Chief
Mobile Source Division

1996 AIR RESOURCES BOARD SUPPLEMENTAL DATA SHEETManufacturer FORD MOTOR COMPANY Eng. Family TFM4.6VJGFFKPass Cars X Lt-Duty Trucks Med-Duty Vehicles Fuel Type UNLEADEDEng. Type V-8 Liter (CID) 4.6 (280) Evap. Family TFM1060AYMABEmission Control System & Special Features 2TWC / 2HO2S(2) / TWC / EGR / SFI / AIR
(Use abbreviations per SAE J1930 June88)Engine: Front X Mid. Rear Drive: FWD X RWD 4WD-FT 4WD-PT

| Eng. Code/ (Cert Std.) | Veh. Models (If Coded see Attachmt.) | Trans. Type: A-Auto M-Man. | ETW | RLHP | Ign. Sys. (PCME/PROM) Part No. | EGR PART NO. -9D475- -9D477- | Catalyst Part No. -5E212- -5E250- |
|------------------------|--------------------------------------|----------------------------|------|------------------|--------------------------------|------------------------------|-----------------------------------|
| 538DR15A | CONTINENTAL | A | 4250 | 5.8 ¹ | F50F-AD | F55E-AA F50E-AA | F50C-EC F50C-CD |
| | CONTINENTAL | A | 4250 | 5.6 ² | F50F-AD | F55E-AA F50E-AA | F50C-EC F50C-CD |
| | CONTINENTAL | A | 4250 | 6.7 ³ | F50F-AD | F55E-AA F55E-AA | F50C-EC F50C-CD |

¹ with P225/60R16 97V BASE TIRE² with P225/60R16 97V GCC TIRE³ with P225/60R16 97H SST TIRECertification Standards

| | <u>50K</u> | <u>100K</u> |
|-------|------------|-------------|
| NMHC: | 0.25 | 0.31 |
| CO: | 3.40 | 4.20 |
| NOx: | 0.40 | 0.60 |
| EVAP: | 2.0 | |

Idle HC/CO Standards

| | |
|---------|--------------------|
| Idle HC | 220 ppm @ 2500 rpm |
| | 100 ppm @ idle |
| Idle CO | 1.2% @ 2500 rpm |
| | 1.0% @ idle |

ENGINE FAMILY: TFM4.6VJGFFK
ISSUED: 6/6/95
REVISED:

20.09.17.02 - 1

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1996 AIR RESOURCES BOARD SUPPLEMENTAL DATA SHEETManufacturer FORD MOTOR COMPANY Eng. Family TFM4.6VJGFFKPass Cars X Lt-Duty Trucks Med-Duty Vehicles Fuel Type UNLEADEDEng. Type V-8 Liter (CID) 4.6 (280) Evap. Family TFM1060AYMABEmission Control System & Special Features 2TWC /2HO2S/EGR/SFI/AIR
(Use abbreviations per SAE J1930 June88)Engine: Front X Mid. Rear Drive: FWD X RWD 4WD-FT 4WD-PT

| Eng. Code/ (Cert Std.) | Veh. Models (If Coded see Attachmt.) | Trans. Type: A-Auto M-Man. | ETW | RLHP | Ign. Sys. (PCME/PROM) Part No. -12A650- | EGR PART NO. -9D475- -9D477- | Catalyst Part No. -5E212- -5E250- |
|---------------------------|---|----------------------------------|------|------------------|--|---------------------------------------|--|
| 538RR15A | CONTINENTAL | A | 4250 | 5.8 ¹ | F50F-BD | F55E-AA F50E-AA | F50C-EC F50C-CD |
| | CONTINENTAL | A | 4250 | 5.6 ² | F50F-BD | F55E-AA F50E-AA | F50C-EC F50C-CD |
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¹ with P225/60R16 97V BASE TIRE² with P225/60R16 97V GCC TIRE³ with P225/60R16 97H SST TIRECertification Standards

| | <u>50K</u> | <u>100K</u> |
|-------|------------|-------------|
| NMHC: | 0.25 | 0.31 |
| CO: | 3.40 | 4.20 |
| NOx: | 0.40 | 0.60 |
| EVAP: | 2.0 | |

Idle HC/CO Standards

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|---------|--------------------|
| Idle HC | 220 ppm @ 2500 rpm |
| | 100 ppm @ idle |
| Idle CO | 1.2% @ 2500 rpm |
| | 1.0% @ idle |

ENGINE FAMILY: TFM4.6VJGFFK
ISSUED: 6/6/95
REVISED:

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