

File

State of California
AIR RESOURCES BOARD

EXECUTIVE ORDER A-10-828
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 1999 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: XFMXT02.5LDC Displacement: 2.5 Liters (152.5 Cubic Inches)

Exhaust Emission Control Systems and Special Features:

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

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

The non-methane organic gas (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 | 0.084 | 0.9 | 0.1 | 0.001 | 3.8 |
| | 100,000 | 0.101 | 1.1 | 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 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.).

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").

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 15th day of July 1998.



R. B. Summerfield, Chief
Mobile Source Operations Division

1999 MODEL-YEAR AIR RESOURCES BOARD SUPPLEMENTAL DATA SHEET

PASSENGER CARS, LIGHT-DUTY TRUCKS AND MEDIUM-DUTY VEHICLES

Manufacturer FORD MOTOR COMPANY Exh. Eng. Fam.: XFMXT02.51DC Evap. Fam.: XFMXE010588E

Engine Code Types: CA XXX 49S 50S AB965 ORVR: Yes No XXX

Exhaust Std: CA Tier-1 TLEV XX LEV ULEV ULEV ULEV SULEV U.S. EPA TIER-1

Vehicle Class(es): PC LDT1 XX LDT2 MDV1 MDV2 MDV3 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 XXX Diesel CNG LNG LPG M85 Other (specify):

Exh Emiss Test Fuel(s): Indo XXX CBG CNG LPG M85 Other(specify): Diesel 13 CCR 2282 40 CFR 86.113-90 40 CFR 86.113-94 40 CFR 86.113-94

Evaporative Emission Test Procedure: California Federal XXX

Service Accum: Std AMA Mod AMA XX Mfr ADP Other (specify)

NMOG Test Procedure: N/A Std XXX Equip R/L Test Procedure: SHED Pt.Source XXX

Engine Configuration I-4 Displacement: 2.5L Liters 152.5 Cubic Inches

Valves/Cyl: 2 Rated HP: 118 @ 4800 RPM

Engine: Front XXX Mid Rear Drive: Fwd RWD XXX 4WD-FT 4WD-PT

Exhaust ECS (e.g., MFI, EGR,TC,CAC): TWC(2),H2S(2) EGR, SFI

(Use abbreviations per SAE J1930 JUN93)

| Engine Code/ CALIF | Veh. Models (all models are 4x2 *) | Trans. Type: A-Auto M-Man. | Equiv. Test Weight | DPA # | Ign. Sys. (ECM/PCM) Part No. -12A650- | EGR Syst. Part No -9D475- | Catalyst Part No. -5E212- |
|-----------------------|--|-------------------------------------|--------------------------|----------|--|------------------------------------|---------------------------------|
| 2.5L | | | | | | | |
| 849SR10 | N MAZDA SC2 SWB | M5 | 3500 | 11.3 | F87F-CBA | F57E--BA | See Cat Chart |
| | A MAZDA SC2 SWB | " | 3625 | 12.4 | " | " | " |
| | N MAZDA SC4 SWB | " | 3625 | 11.3 | " | " | " |
| | A MAZDA SC4 SWB | " | 3750 | 12.4 | " | " | " |
| | N RANGER SC2SWB | " | 3625 | 11.3 | " | " | " |
| | A RANGER SC2SWB | " | 3625 | 12.4 | " | " | " |
| | N RANGER SC4SWB | " | 3750 | 11.3 | " | " | " |
| | A RANGER SC4SWB | " | 3750 | 12.4 | " | " | " |
| 9B1MBAA | N MAZDA RC SWB | M5 | 3375 | 11.3 | XL5F-EA | F57E--BA | See Cat Chart |
| | A MAZDA RC SWB | " | 3375 | 12.4 | " | XF1E-CAS | " |
| | N MAZDA SC2 SWB | " | 3500 | 11.3 | " | " | " |
| | A MAZDA SC2 SWB | " | 3625 | 12.4 | " | " | " |
| | N MAZDA SC4 SWB | " | 3625 | 11.3 | " | " | " |
| | A MAZDA SC4 SWB | " | 3750 | 12.4 | " | " | " |
| | N RANGER RC SWB | " | 3375 | 11.3 | " | " | " |
| | N RANGER RC LWB | " | 3500 | 11.3 | " | " | " |
| | A RANGER RC SWB | " | 3500 | 12.4 | " | " | " |
| | A RANGER RC LWB | " | 3500 | 12.4 | " | " | " |
| | N RANGER SC2SWB | " | 3625 | 11.3 | " | " | " |
| | A RANGER SC2SWB | " | 3625 | 12.4 | " | " | " |
| | N RANGER SC4SWB | " | 3750 | 11.3 | " | " | " |
| | A RANGER SC4SWB | " | 3750 | 12.4 | " | " | " |

Same DPA for all tires (P205/75R14, P225/70R15)

* SWB = Short Wheel Base, LWB = Long Wheel Base

* RC = REGULAR CAB, SC2 = SUPER CAB 2 Door, SC4 = SUPER CAB 4 Door

@ Test at next higher ETW

\$ Alternate part number

Certification Standards