

Exec

State of California
AIR RESOURCES BOARD

EXECUTIVE ORDER A-10-349
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 Orders G-45-3 and G-45-4;

IT IS ORDERED AND RESOLVED: That 1988 model-year Ford Motor Company emission control systems are certified as described below for gasoline-powered light-duty trucks:

<u>Engine Family</u>	<u>Displacement Liters (Cubic Inches)</u>	<u>Exhaust Emission Control Systems (Special Features)</u>
JFM2.3T5FFG1	2.3 (140)	Exhaust Gas Recirculation Oxygen Sensor Three-Way Catalyst (Electronic Port Fuel Injection)

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

The following are the emission standards for this engine family:

<u>Loaded Vehicle Weight</u>	<u>Hydrocarbons Grams per Mile</u>	<u>Carbon Monoxide Grams per Mile</u>	<u>Nitrogen Oxides Grams per mile</u>
3751-5750	0.39	9.0	1.0

The following are the certification emission values for this engine family:

<u>Loaded Vehicle Weight</u>	<u>Hydrocarbons Grams per Mile</u>	<u>Carbon Monoxide Grams per Mile</u>	<u>Nitrogen Oxides Grams per Mile</u>
3751-5750	0.11	2.2	0.4

BE IT FURTHER RESOLVED: That the listed vehicle models also comply with "California Evaporative Emission Standards and Test Procedures for 1978 and Subsequent Model Gasoline-Powered 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" (Title 13, California Administrative Code, Section 2290) for the aforementioned model-year.

BE IT FURTHER RESOLVED: That the listed vehicle models also comply with the Board's high altitude requirements and highway emission standards 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 Tune-Up Label Specifications" (Title 13, California Administrative Code, Section 1965) for the aforementioned model year.

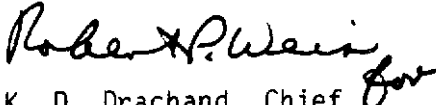

BE IT FURTHER RESOLVED: That the vehicle models listed have been granted an exemption from compliance with the requirements of the "Malfunction and Diagnostic System for 1988 and Subsequent Model Year[s] ..." (Title 13, California Administrative Code, Section 1968) for the aforementioned model year.

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 regulations (Title 13, California Administrative Code, 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 24th day of July, 1987.


K. D. Drachand, Chief 
Mobile Source Division

1988 AIR RESOURCES BOARD SUPPLEMENTAL DATA SHEET

E.O. # A-10-349

Passenger Cars _____ light-Duty Trucks X Medium-Duty Vehicles _____ Gas X Diesel _____ Page 2A

Manufacturer Ford Motor Company Engine Family J2.3TFG (JFM2.3T5FFG1)

Liter (CID) 2.3 (140) Eng. Type I4

Emission Control Sys. (Special Features) EGR, OS, TWC (EFI)

Engine Code	Vehicle Models (If Coded see attachment) (Dyno Hp)	Trans. Type (M5)	Equiv. Test Weight	Ign. System (ECU) EEC IV Part No.	Fuel System (EFI) Part No.	EGR Valve Part No.	Catalyst (TWC) Part No.
849TR00A/N	Ranger 4x2 RCS (11.4) RCL (11.4)	M5X372	3000	E8TF-AVA	E59E-AB	E59E-AC/ E79E-BA	E77A-KB
	Ranger 4x4 RCS (12.9) RCL (12.9)		3250				
849GR00A/N	Ranger 4X2 SCS (11.4)			E8TF-VB			

Comments: See page one for abbreviations and evaporative emission family identification. Please refer to manufacturer's HP list for correct dyno test HP settings based on model and equipment. If two test weights are listed, the lower weight will be used for testing.

Date of Issue: JUL 10 1987

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1988 AIR RESOURCES BOARD SUPPLEMENTAL DATA SHEET

E.O. # A-10-349

Passenger Cars _____ light-Duty Trucks X Medium-Duty Vehicles _____ Gas X Diesel _____ Page 2B

Manufacturer Ford Motor Company Engine Family J2.3TFG (JFM2.3T5FFG1)

Liter (CID) 2.3 (140) Eng. Type I4

Emission Control Sys. (Special Features) EGR, OS, TWC (EFI)

Engine Code	Vehicle Models (If Coded see attachment) (Dyno Hp)	Trans. Type L4	Equiv. Test Weight	Ign. System (ECU) EEC IV Part No.	Fuel System (EFI) Part No.	EGR Valve Part No.	Catalyst (TWC) Part No.
850TR00A/N	Ranger 4x2 RCS (11.4) RCL (11.4)	A4X024	3125	E7TF-JA	E59E-AB	E59E-AC/ E79E-BA	E77A-KB

Comments: See page one for abbreviations and evaporative emission family identification. Please refer to manufacturer's HP list for correct dyno test HP settings based on model and equipment. If two test weights are listed, the lower weight will be used for testing.

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1988 AIR RESOURCES BOARD SUPPLEMENTAL DATA SHEET

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Manufacturer Ford Motor Company Engine Family J2.3TFG (JFM2.3T5FFG1)
 Evaporative Family BHM Engine Type I4
 Liters (CID) 2.3 (140)

ABBREVIATIONS

Ignition System

CA-Centrifugal Advance
 ECU-Electronic Control Unit
 EI-Electronic Ignition
 ESAC-Electronic Spark Advance
 Control
 VA-Vacuum Advance
 VR-Vacuum Retard

Exhaust Emissions Control System

AIP-Air Injection Pump
 AIV-Air Injection Valve
 DBC-Dual Bed Catalyst
 EGR-Exhaust Gas Recirculation
 EIC-Electronic Injection Control
 EM-Engine Modification
 OC-Oxidation Catalyst
 OS-Oxygen Sensor
 HOS-Heated Oxygen Sensor
 SPL-Smoke Puff Limiter or
 Throttle Delay
 TOC-Trap Oxidizer, Continual
 TOP-Trap Oxidizer, Periodical
 TWC-Three-way Catalyst
 WUOC-Warm-up Oxidation Catalyst
 WUTWC-Warm-up Three-way Catalyst

Special Features

CCV-Combustion Chamber Valve
 CFI-Central Fuel Injection or Throttle Body Injection
 DID-Diesel Injection-Direct
 DIP-Diesel Injection-Prechamber
 EFI-Electronic Fuel Injection
 IC-Intercooler or Aftercooler
 MFI-Mechanical Fuel Injection
 OBD-On-Board Diagnostics
 TC-Turbocharger

Fuel System

CFI, CL, DID, DIP, EFI, MFI
 nV-nVenturi Carburetor

VEHICLE MODELS:

Ranger 4x2
 Regular Cab (SWB, LWB)
 Super Cab (SWB)

Ranger 4x4
 Regular Cab (SWB, LWB)

ne: Front X Mid Rear
 Drive: FWD RWD X 4WD Full Time 4WD Part Time X