State of California
AIR RESOURCES BOARD

EXECUTIVE ORDER A-10-406-1
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 1989 model-year Ford Motor Company exhaust emission control systems are certified as described below for gasoline-powered passenger cars:

Engine Family	Displacement Liters	(Cubic Inches)	Exhaust Emission Control Systems (Special Features)
KFM3.8V5FED1	3.8	(231)	Exhaust Gas Recirculation Heated Oxygen Sensor Dual Dual Bed Catalysts (Sequential Port Fuel Injection) (Supercharger) (Intercooler) On-Board Diagnostics (Exempted)

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

The following are the emission standards for this engine family:

Hydrocarbons (Grams per Mile)	Carbon Monoxide (Grams per Mile)	Nitrogen Oxides (Grams per Mile)
0.39	7.0	0.7

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

Hydrocarbons (Grams per Mile)	Carbon Monoxide (Grams per Mile)	Nitrogen Oxides (Grams per Mile)
0.12	2.1	0.4

BE IT FURTHER RESOLVED: That the listed models are certified to the optional NOx emission standard thereby making the vehicle manufacturer subject to Section 1960.1.5 of Title 13, California Code of Regulations which includes recall liability for emission control components up to 7 years or 75,000 miles if found defective by the Executive Officer.

BE IT FURTHER RESOLVED: That the vehicle manufacturer is certifying to the the optional NOx standard by providing evidence that there are sufficient projected sales of vehicles certifying to the primary NOx emission standard, or is allowed a delay in implementation under the small volume manufacturer provisions, or is allowed a delay in implementation under the

"in lieu" standards, or is certifying passenger cars weighing more than 5250 lbs. loaded vehicle weight.

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 Code of Regulations, 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 Code of Regulations, 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 Code of Regulations, 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 Code of Regulations, Section 2035 et seq.) and with the 2 year/24,000 mile warranty provisions of Health and Safety Code Section 43204.

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.

This Executive Order cancels and supersedes Executive Order A-10-406 issued October 18, 1988.

Executed at El Monte, California this 8th day of December, 1988.

Bob Grass for

K. D. Drachand, Chief
Mobile Source Division

E.O.# A-10-406-1

1989 AIR RESOURCES BOARD SUPPLEMENTAL DATA SHEET

Manufacturer Ford Motor Company

Engine Family KFM3.8V5FED1

Evaporative Family 9HM

Engine Type V6

Liters (CID) 3.8L (231)

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
SC-Supercharger
SPFI-Sequential Port Fuel Injection

Fuel System

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

VEHICLE MODELS:

THUNDERBIRD SUPERCOUPE
COUGAR XR7

Engine: Front XXX Mid ___ Rear ___
Drive: FWD ___ RWD XXX 4WD Full Time ___ 4WD Part Time ___

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Engine Family K3.8VED

Issue Date	10/4/88			17.00.00.00-3			
Revised							

E.O. # A-10-406-1

1989 AIR RESOURCES BOARD SUPPLEMENTAL DATA SHEET

Passenger Cars XXXXX Light-Duty Trucks _____ Medium-Duty Vehicles _____ Gas XXXXX Diesel _____

Manufacturer FORD MOTOR COMPANY Engine Family KFM3.8V5FED1

Liter (CID) 3.8 (231) Eng. Type V6

Emission Control Sys. (Special Features) .DBC.SC.HOS.EGR.TWC.S PFI.IC.OBD

Engine Code	Vehicle Models (If Coded see attachment) (Dyno Hp)	Trans. Type	Equiv. Test Weight	Ign. System (ECU) Part No. -12A650-	Fuel System Injector Part No. -9F593-	EGR Valve Part No. -9D475-	Catalyst Part No. -5G214-
915SR00A	THUNDERBIRD SC (9.2) COUGAR XR7 (9.8)	M5-OD	4000 2/	E9SF- -KA	E9SE- -BB	E9SE- -BA	E9SC- -VC
916SR00A	THUNDERBIRD SC (9.2) COUGAR XR7 (9.8)	A4-OD		E9SF- -MA			E9SC- -UA

2/ TEST AT 4250 ETW

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:
Revisions:
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Engine Family K3.8VED

Issue Date	10/4/88			17.00.00.00-2			
Revised							

E.O. # A-10-406

1989 AIR RESOURCES BOARD SUPPLEMENTAL DATA SHEET

Passenger Cars XXXXX Light-Duty Trucks _____ Medium-Duty Vehicles _____ Gas XXXXX Diesel _____

Manufacturer FORD MOTOR COMPANY Engine Family KFM3.8V5FED1

Liter (CID) 3.8 (231) Eng. Type V6

Emission Control Sys. (Special Features) ESAC.DBC. HOS.EGR.TWC.EPFI.IC.OBD.SC

Engine Code	Vehicle Models (If Coded see attachment) (Dyno Hp)	Trans. Type	Equiv. Test Weight	Ign. System (ECU) Part No. -12A650-	Fuel System Injector Part No. -9F593-	EGR Valve Part No. -9D475-	Catalyst Part No. -5G214-
915SR00A	THUNDERBIRD SC (9.2) COUGAR XR7 (9.8)	M5-OD	4000 2/	E9SF- -KA OR E9SF- -KB	E9SE- -BB	E9SE- -BA	E9SC- -VC
916SR00A	THUNDERBIRD SC (9.2) COUGAR XR7 (9.8)	A4-OD		E9SF- -MA OR E9SF- -MB			E9SC- -UA

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Date of Issue:
Revisions:
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Engine Family K3.8VED

Issue Date	10/4/88			17.00.00.00-2			
Revised	11/30/88						