State of California
AIR RESOURCES BOARD

EXECUTIVE ORDER A-10-402
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 light-duty trucks:

Engine Family	Displacement Liters (Cubic Inches)	Exhaust Emission Control Systems (Special Features)
KFM2.9T5FRD8	2.9 (179)	Heated Oxygen Sensor Three-Way Catalyst (Electronic Port Fuel Injection) 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:

Loaded Vehicle Weight(lbs.)	Hydrocarbons (Grams per Mile)	Carbon Monoxide (Grams per Mile)	Nitrogen Oxides (Grams per Mile)
0-3750	0.39	9.0	0.4

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

Loaded Vehicle Weight(lbs.)	Hydrocarbons (Grams per Mile)	Carbon Monoxide (Grams per Mile)	Nitrogen Oxides (Grams per Mile)
0-3750	0.17	5.0	0.0

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 12th day of September, 1988.

K. D. Drachand, Chief
Mobile Source Division

E.O.# A-10-402

1989 AIR RESOURCES BOARD SUPPLEMENTAL DATA SHEET

ıufacturer Ford Motor Company Engine Family K2.9TRD (KFM2.9T5FRD8)

ıporative Family 9HM Engine Type V6

Liters (CID) 2.9 (179)

BREVIATIONS

ıition System

Centrifugal Advance
J-Electronic Control Unit
-Electronic Ignition
AC-Electronic Spark Advance Control
-Vacuum Advance
-Vacuum Retard

Exhaust Emissions Control System

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

Special Features

CFI-Central Fuel Injection or Throttle Body Injection
EPFI-Electronic Port Fuel Injection
MPFI-Mechanical Port Fuel Injection
SFI-Sequential Fuel Injection
DID-Diesel Injection-Direct
DIP-Diesel Injection-Prechamber
TC-Turbocharger
SC-Supercharger
IC-Intercooler or Aftercooler
CCV-Combustion Chamber Valve
OBD-On-Board Diagnostics

el System

, EPFI, MPFI, SFI, DID, DIP, HOS, OS
-nVenturi Carburetor
-Variable Venturi Carburetor

HICLE MODELS:

ıger 4x2
CS, RCL, SCS

ıger 4x4
CS, RCL, SCS

nco II 4x2 Utl

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

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E.O. # A-10-402

1989 AIR RESOURCES BOARD SUPPLEMENTAL DATA SHEET

assenger Cars _____ light-Duty Trucks X Medium-Duty Vehicles _____ Gas X Diesel _____

urer Ford Motor Company Engine Family K2.9TRD (KFM2.9T5FRD8)

ter (CID) 2.9 (179) Eng. Type V6

ission Control Sys. (Special Features) TWC, HOS (EPFI, OBD)

Engine Code	Vehicle Models (If Coded see attachment) (Dyno Hp)	Trans. Type	Equiv. Test Weight	Ign. System (ECU) (EEC IV) Part No. -12A650-	Fuel System (EPFI) Part No. -9F593-	EGR Valve (None) Part No.	Catalyst (TWC) Part No. -5E212-
55SR00A/N	Ranger 4x2	M5		E9TF-EA	E67E-BB		E97A-DA
	RCS (11.0)		3250				
	(12.2*)						
	RCL (11.0)						
	(12.4*)		3375*				
	SCS (11.3)		3500				
	(12.4*)						

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

with air conditioning

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Revisions:

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1989 AIR RESOURCES BOARD SUPPLEMENTAL DATA SHEET

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65TR00A/N	Ranger 4x4	M5		E9TF-UA	E67E-BB		E97A-DA
	RCS (12.1)		3500				
	(13.3*)		3625*				
	RCL (12.1)		3625				
	(13.3*)						
	SCS (12.1)		3750				
	Bronco II 4x2						
	Utl (10.5)		3625				
	(11.6*)		3750*				

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1989 AIR RESOURCES BOARD SUPPLEMENTAL DATA SHEET

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

Manufacturer Ford Motor Company Engine Family K2.9TRD (KFM2.9T5FRD8)

Liter (CID) 2.9 (179) Eng. Type V6

Emission Control Sys. (Special Features) TWC, HOS (EPFI, OBD)

Engine Code	Vehicle Models (If Coded see attachment) (Dyno Hp)	Trans. Type	Equiv. Test Weight	Ign. System (ECU) (EEC IV) Part No. -12A650-	Fuel System (EPFI) Part No. -9F593-	EGR Valve (None) Part No.	Catalyst (TWC) Part No. -5E212-
966SR02A/N	Ranger 4x2 RCS (11.0) (12.2*) RCL (11.0) (12.4*) SCS (11.3) (12.4*)	A4LD	 3250 3375* 3500	E9TF-JB	E67E-BB		E97A-DA

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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1989 AIR RESOURCES BOARD SUPPLEMENTAL DATA SHEET

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66TR02A/N	Ranger 4x4	A4LD		E9TF-VB	E67E-BB		E97A-DA
	RCS (12.1)		3500				
	(13.3*)		3625*				
	RCL (12.1)		3625				
	(13.3*)						
	SCS (12.1)		3750				
	Bronco II 4x2						
	Utl (10.5)		3750				

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