

State of California
AIR RESOURCES BOARD

EXECUTIVE ORDER A-10-352
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 exhaust 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>
JFM2.9T5FRC6	2.9 (179)	Heated Oxygen Sensor Three-Way Catalyst (Electronic Port Fuel Injection) (On-Board Diagnostics)

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>
0-3750	0.39	9.0	1.0
3751-5750	0.50	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>
0-3750	0.21	4.3	0.1
3571-5750	0.23	6.4	0.1

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 also comply with 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.) and, with 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.

Executed at El Monte, California this 4th day of August, 1987.


K. D. Drachand, Chief
Mobile Source Division

1988 AIR RESOURCES BOARD SUPPLEMENTAL DATA SHEET

E.O. # A-10-352

Page 2A

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

Manufacturer Ford Motor Company Engine Family J2.9TRC (JFM2.9T5FRC6)

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

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

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 None Part No.	Catalyst (TWC) Part No.
65SR00A/N	Ranger 4x2 RCS (11.4/12.5*) RCL (11.4/12.5*) SCS (11.6/12.8*)	M5X372	3125 3125/ 3250* 3375	E8TF-MA	E7DE-BB/ E67E-BB		E87A-HA **E67A-5E212-HC
65TR00A/N	Ranger 4x4 RCS (12.9/14.2*) RCL (12.9/14.2*) SCS (12.9/14.2*) Bronco II 4x2 Std (10.8/11.9*) Bronco II 4x4 Std (11.6/12.8*)	L5X377 M5X372 L5X377	3375 3375/ 3500* 3625/ 3750* 3500/ 3625* 3625/ 3750*	E8TF-RA			**E77A-5E212-NA

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.

with air conditioning
Date of Issue: JUL 28 1987

**Addition per running change 2.9-106

1988 AIR RESOURCES BOARD SUPPLEMENTAL DATA SHEET

E.O. # A-10-352

Page 2B

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

Manufacturer Ford Motor Company Engine Family J2.9TRC (JFM2.9T5FRC6)

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

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

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 None Part No.	Catalyst (TWC) Part No.
66SR00A/N	Ranger 4x2 RCS (11.4/12.5*)	A4X033	3125/ 3250*	E8TF-TA	E7DE-BB/ E67E-BB		E87A-HA
	RCL (11.4/12.5*) SCS (11.6/12.8*)		3375/ 3500*				*E67A-5E212- HC
	Ranger 4x4 RCS (12.9/14.2*)		3375/ 3500*				*E77A-5E212- NA
	RCL (12.9/14.2*) SCS (12.9/14.2*)		3500 3750				
	Bronco II 4x2 Std (10.8/11.9*)		3625				
	Bronco II 4x4 Std (11.6/12.8*)		3750				

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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**Addition per running change 2.9-106

Comments:

1988 AIR RESOURCES BOARD SUPPLEMENTAL DATA SHEET

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Manufacturer Ford Motor Company Engine Family J2.9TRC (JFM2.9T5FRC6)
 Evaporative Family 8HM Engine Type V6
 Liters (CID) 2.9 (179)

ABBREVIATIONS

<u>Ignition System</u>	<u>Exhaust Emissions Control System</u>	<u>Special Features</u>
CA-Centrifugal Advance	AIP-Air Injection Pump	CCV-Combustion Chamber Valve
ECU-Electronic Control Unit	AIV-Air Injection Valve	CFI-Central Fuel Injection or Throttle Body Injection
EI-Electronic Ignition	DBC-Dual Bed Catalyst	DID-Diesel Injection-Direct
ESAC-Electronic Spark Advance Control	EGR-Exhaust Gas Recirculation	DIP-Diesel Injection-Prechamber
VA-Vacuum Advance	EIC-Electronic Injection Control	EFI-Electronic Fuel Injection
VR-Vacuum Retard	EM-Engine Modification	IC-Intercooler or After cooler
	OC-Oxidation Catalyst	MFI-Mechanical Fuel Injection
	OS-Oxygen Sensor	OBD-On-Board Diagnostics
	HOS-Heated Oxygen Sensor	TC-Turbocharger
	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	

Fuel System

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

VEHICLE MODELS:

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

Bronco II 4x2
 Standard

Ranger 4x4
 Regular Cab (SWB, LWB)
 Super Cab (SWB)

Bronco II 4x4
 Standard

Engine: Front X Mid ___ Rear ___
 Drive: FWD ___ RWD X 4WD Full Time ___ 4WD Part Time X
 SDS2.90

1988 AIR RESOURCES BOARD SUPPLEMENTAL DATA SHEET

Passenger Cars _____ light-Duty Trucks X Medium-Duty Vehicles _____ Gas X Diesel _____Manufacturer Ford Motor Company Engine Family J2.9TRC (JFM2.9T5FRC6)Liter (CID) 2.9 (179) Eng. Type V6Emission Control Sys. (Special Features) HOS, TWC (EFI, OBD)

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 None Part No.	Catalyst (TWC) Part No.
865SR00A/N	Ranger 4x2 RCS (11.4/12.5*) RCL (11.4/12.5*) SCS (11.6/12.8*)	M5X372	3125 3125/ 3250* 3375	E8TF-MA	E7DE-BB/ E67E-BB		E87A-HA
865TR00A/N	Ranger 4x4 RCS (12.9/14.2*) RCL (12.9/14.2*) SCS (12.9/14.2*)	L5X377	3375 3375/ 3500* 3625/ 3750*	E8TF-RA			
	Bronco II 4x2 Std (10.8/11.9*)	M5X372/ L5X377#	3500/ 3625*				
	Bronco II 4x4 Std (11.6/12.8*)	L5X377	3625/ 3750*				

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.

* with air conditioning

Date of Issue: 7-28-87

Revisions: #10-28-87 (R/C 2.9-109)

1988 AIR RESOURCES BOARD SUPPLEMENTAL DATA SHEET

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

Manufacturer Ford Motor Company Engine Family J2.9TRC (JFM2.9T5FRC6)

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

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

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 None Part No.	Catalyst (TWC) Part No.
866SR00A/N \$R11A/N	Ranger 4x2 RCS (11.4/12.5*) RCL (11.4/12.5*) SCS (11.6/12.8*) Ranger 4x4 RCS (12.9/14.2*) RCL (12.9/14.2*) SCS (12.9/14.2*) Bronco II 4x2 Std (10.8/11.9*) Bronco II 4x4 Std (11.6/12.8*)	A4X033/ A4X034#	3125/ 3250* 3375/ 3500* 3375/ 3500* 3500 3750 3625 3750	E8TF-TA \$E8TF-TC	E7DE-BB/ E67E-BB		E87A-HA

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.

* with air conditioning
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