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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:

Engine Family		splacement (Cubic Inches)	Exhaust Emission Control Systems (Special Features)
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:

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

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

Loaded Vehicle Weight	Hydrocarbons Grams per Mile	Carbon Monoxide Grams per Mile	Nitrogen Oxides Grams per Mile
3751-575 0	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 $oldsymbol{\mathcal{L}}$ Mobile Source Division

E.O. # <u>A-10-349</u>

1988	AIR	RESOURCES	MAAUR	SUPPLEMENTAL	DATA	CHECT
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Passenger	Carslight-E	uty Truck	s <u>X</u> N	Medium-Duty Veh	icles G	Pag as <u>X</u> Die	ge <u>2A</u> esel
	er <u>Ford Motor Co</u>						
) _2.3 (140)						
	ontrol Sys. (Speci						
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	Catalyst (TWC) Part No.
849TROOA/N	RCS (11.4) RCL (11.4) Ranger 4x4	M5X372	3000	EBTF-AVA	E59E-AB	E59E-AC/ E79E-BA	E77A-KB
849GR00A/N	RCS (12.9) RCL (12.9) Ranger 4X2 SCS (11.4)		3250	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 1 0 1987 /isions:

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****	1988	3 AIR RES	OURCES BOA	ARD SUPPLEMENTA	AL DATA SHEET	E.O. # <u>A-1</u>	0-349
Passenger	Cars light-[outy Truck	(s <u>X</u> M	edium-Duty Veh	nicles Ga	Pag as X Die	je <u>28</u> :sel
nufactur	er <u>Ford Motor Co</u>	mpany		Engine Fam	ily <u>J2.3TFG</u>	(JFM2.3T5FFG	61)
	2.3 (140)						
	ontrol Sys. (Speci						
Engine Code	Vehicle Models (If Coded see attachment)	Trans. Type L4	Equiv. Test Weight	Ign. System (ECU) EEC IV Part No.	Fuel System (EFI)	EGR Valve	Catalys
	(Dyno Hp)			rait Nu.	Part No.	Part No.	Part No.
850TROOA/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 <u>Ford Motor Comp</u>	any Engine Family <u>J2.3TFG</u>	(JFM2.3T5FFG1)			
Evaporative Family 8HM	Engine Type <u>I4</u>				
	Liters (CID) <u>2.3 (140)</u>				
ABBREVIATIONS	,				
Ignition System	Exhaust Emissions Control System	Special Features			
CA-Centrifugal Advance ECU-Electronic Control Unit EI-Electronic Ignition ESAC-Electronic Spark Advance Control VA-Vacuum Advance VR-Vacuum Retard	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	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			
Fuel System CFI, CL, DID, DIP, EFI, MFI nV-nVenturi Carburetor		MFI-Mechanical Fuel Injection OBD-On-Board Diagnostics			
VEHICLE MODELS: Ranger 4x2 Regular Cab (SWB, LWB) Super Cab (SWB)		TC-Turbocharger			
Ranger 4x4 Regular Cab (SWB, LWB)					

ne: Front X Mid Rear

Drive: FWD RWD X 4WD Full Time 4WD Part Time X