#### State of California AIR RESOURCES BOARD

# EXECUTIVE ORDER A-10-293 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 1986 model-year Ford Motor Company exhaust emission control systems are certified as described below for gasoline-powered light-duty trucks:

Engine Family	Displacement Cubic Inches (Liters)		Exhaust Emission Control Systems (Special Features)
GFM2.3T5FGG9	140	(2.3)	Exhaust Gas Recirculation Three-Way Catalyst with Closed Loop (Electronic 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:

Equivalent Inertia Weight	Hydrocarbons Grams per Mile	Carbon Monoxide Grams per Mile	Nitrogen Oxides Grams per mile
0-3999	0.39	9.0	1.0

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

Equivalent Inertia Weight	Hydrocarbons Grams per Mile	Carbon Monoxide Grams per Mile	Nitrogen Oxides Grams per Mile
0-3999	0.23	4.5	0.4

BE IT FURTHER RESOLVED: That the listed models were certified to the optional NOx emission standard thereby making the vehicle manufacturer subject to Section 1960.1.5 of Title 13, California Administrative Code 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 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 1981 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 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 Health and Safety Code Section 43204, provided, however, that Jurisdiction is hereby reserved to modify these provisions to the extent made necessary by an EPA waiver decision, in order to assure that the listed vehicles comply with the minimum federal requirements applicable in California.

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 5th day of April, 1985.

K. D. Drachand, Chief Mobile Source Division

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Manufacturer Ford Motor Company Executive Order No. A-10-293

Engine Family GFM2.3T5FGG9 (G2.3TGG) Evaporative Family 6HM

Engine CID (Liters) 140 (2.3)

#### **ABBREVIATIONS**

## Ignition System

CA-Centrifugal Advance
EEC-Electronic Engine Control
EI-Electronic Ignition
ESAC-Electronic Spark Advance
Control
VA-Vacuum Advance
VR-Vacuum Retard

Fuel System
CFI, CL, DID, DIP, EFI, MFI
nV-nVenturi Carburetor
a'V-Variable Venturi

# Exhaust Emissions Control System

AIP-Air Injection-Pump AIV-Air Injection-Valve CL-Closed Loop EGR-Exhaust Gas Recirculation EM-Engine Modification OC-Oxidation Catalyst System TOG-Trap Oxidizer Continual TOP-Trap Oxidizer Periodical TR-Thermal Reactor TWC-Three-Way Catalyst System

## Special Features

CCV-Combustion

Chamber Valve CFI-Central Fuel Injection DID-Diesel Injection-Direct DIP-Diesel Injection-Prechamber EFI-Electronic Fue1 Injection IC - Intercooler MFI-Mechanical Fue 1 Injection TC-Turbocharged

## VEHICLE MODELS:

Ranger 4x2
Regular Cab (SWB; LWB)
Super Cab (SWB)
Chassis Cab (LWB)

Ranger 4x4

Regular Cab (SWB, LWB)

Super Cab (SWB)

Bronco II 4x2 Standard

Aerostar 4x2 Van (SWB) Bus (SWB)

DRIVE SYSTEM: Front Engine/Rear-Wheel Drive

Engine Family <u>G2.3TGG</u>

ſ	Issue Date: FEB 2 6 1985	17-3	
ł	13306 Date. P2 6 1 1303		
	Revised.		

1986 AIR RESOURCES BOARD SUPPLEMENTAL DATA SHEET

Passenger Cars X Light-Duty Trucks Medium-Duty Vehicles X Gas Diese

Manufacturer Ford Motor Company

Engine Family GFM2.3T5FGG9 (G2.3TGG)

ECS (Special Features) EGR, TWC, CL (EFI)

Medium-Duty Vehicles X Gas Diese

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Engine 5-49S R10A/N

Code 5-49R R00A/N

CID (Liter)- 140 (2.3)

Type 14

Engine Code	Vehicle Models (if Coded see attachment)	Trans.	Equiv. Test Weight	Ign. System EEC IV	Fuel System.	EGR Valve Sonic	Label Ident.
		<b>∤</b>	<u></u>	Part No.	Part No.	Part No.	Part No.
5-49S R10A/N 5-49S R00A/N		Y5X396 (M5)	3000 3250	E5TF-12A650   MB##	E59E-9F593   AA/AB	E59E-9F483 AC	AAY
	4x4 RCS RCL SCS		•3125 3250 3375				
<b>\</b>	Bronco II 4x2 STD		3500				
•	Ranger 4x4 RCS RCL SCS	K5X397 (M5)	3125 3250 3375				
5-49R R00A/N	Aerostar Van SWB Bus SWB	Y5X396 (M5)	3250 <b>*</b> 3625 <b>*</b>		÷		AAG
5-4,9R R10B#	Aerostar Van SWB Bus SWB "	-	3250 3625			·	AGB

Corments: 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.

Revisions:

Engine Family 62.3TGG

Issue Date: <b>FEB 2 6 1985</b>	17-4A-Q	
Revised: APR 26 JUN 19 AUI	ن <u>د</u>	

<sup>\* 4-26-85</sup> R/C 2.3-103 (Change ETWs & delete Chassis-cab)

<sup># 6-19-85</sup> R/C 2.3-108 (Add calibration w/revised curb idle)

<sup>## 8-7-85</sup> CAPL Update

<sup>\$ 8-9-85</sup> R/C 2.3-119 (Add calibration w/revised curb idle)

1986 AIR RESOURCES BOARD SUPPLEMENTAL DATA SHEET

) _	_ Passenger Cars	X Light-Duty Trucks	Medium-Duty	Vehicles	.X Gas	Diese
	Manufacturer _	Ford Motor Company		Page	2B	
	Engine Family	GFM2.3T5FGG9 /G2.3TG	a)e	Engine Code	5-50S 5-50R	R10A/N R00A/N
	ECS (Special F	eatures) EGR, TWC, CL	(EFI)		140 (2. 14	

Engine Code	Vehicle Models (If Coded see attachment)	Trans.	Equiv. Test Weight	Ign. System  EEC IV  Part No.	Fuel System.  EFI  Part No.	EGR Valve Sonic Part No.	Label Ident. Part No
-50S R10A/N	Ranger 4x2 RCS RCL SCS	A4X007 (L4)	3000 3125* 3250	E5TF-12A650 LB##	E59E-9F593 AA	E59E-9F483 AC	
-50R R00A/N	Aerostar Van SWB		•				AAG
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•						,	
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Corments: 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.

Revisions: \* 4-26-85 R/C 2.3-103 (Change ETW & delete Aerostar Bus) ## 8-7-85 CAPL Update

Issue Date: CFR 2.6	6 1 <del>7-48 l</del>	
Revised: APR 2 8 JUN	P AIG 9	

1986 DPA SEITINGS Light Duty Truck

	<b>9</b> 77.7	Non A	/C I	<b>A/</b> 0	
Vehicle Line	ETW Limit	COT	DPA I	CDT	DPA
Ranger (4X2)	3125 ETW   3500 ETW	13.46 15.19	11.4(C) 11.6(P)	12.48 14.81	12.5(C) 12.8(P)
Ranger (4X2) Chassis Cab	3625 ETW   28.05F	11.47	15.2(C)	18.68	16.6(C)
Ranger (4X2) Chassis Cab	3875 ETW   42.05F	10.98	18.1(C)	16.33	19.5(C)
Ranger (4X4)	3750 EW	14.23	12.9(P)	13.20	14.2(P)
Bronco II (4X4)	3875 EIW	14.86	11.6(P)	13.88	12.8(P)
Bronco II · (4X2)	3875 ETW	15.52	18.8	14.40	11.9
F-150 (4X2)	4000 EN 4500 EN 4750 EN	13.24 14.18 15.42	13.2(C)1/ 14.0(C) 15.2(C)	12.41 13.20 14.35	14.5(C) 15.4(C) 16.6(C)
F-250 (4X2)	5000 ETW	14.18R 12.77B	16.2R(C) 18.0B(C)	13.30R 12.04B	17.6R(C) - 19.4B(C)
F-150 (4X4)	5000 EIN	14.19R 12.23B	16.5R(C) 18.6B(C)	13.30R 11.59B	17.9R(C) 20.0B(C)
F-250 (4X4)	5250 EDW   5500 EDW	14.03R 12.53B	17.7R(C) 20.0B(C)	13.18R 11.90B	19.1R(C) 21.4B(C)
U-150 (4X4)	5000 ETW   5250 ETW	15.42R 12.51B	14.0R(C) 17.2B(C)	14.36R 11.88B	15.4R(C) 18.6B(C)
Aerostar	.3875 EIW	15.94	11.1	14.64	12.2
E-150	5250 ETM	   15.38	15.2(C)	14.35	16.6(C)
E-250	5500 ETW   6000 ETW	   14.16R   13.71B	17.3R(C) 18.0B(C)	13.31 13.05	18.7R(C) 19.4B(C)

NOTES: 1/F-150 w/SF/2/1/50 spoiler.

(C) - Carryover Date

(F) - Pending DIA Approval

R - Radial Tire; B - Bias Tire

Engine Family <u>G2.3TGG</u>

issue Date: FEB 2 6 1985	17-5	 
Revised		