EO Book

State of California
AIR RESOURCES BOARD

EXECUTIVE ORDER A-10-343
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 and medium-duty vehicles:

Engine Family	Displacement Liters (Cubic Inches)		Exhaust Emission Control Systems (Special Features)
JFM4.9T5HGG6	4.9	(300)	Air Injection - Pump Exhaust Gas Recirculation Three-Way Catalyst Oxidation Catalyst Oxygen Sensor (On-Board Diagnostics) (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	0.50	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
3751-5750	0.21	2.1	0.5

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.).

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 23rd day of July, 1987.

Norma Kaye for
K. D. Drachand, Chief
Mobile Source Division

E.O. # A-10-343

19 88 AIR RESOURCES BOARD SUPPLEMENTAL DATA SHEET

Manufacturer: Ford Motor Company

Engine Family: JFM4.9T5HGG6

Evaporative Family: 8HM

Engine Type: I6

Liters (CID): 4.9L (300 CID)

ABBREVIATIONS

Ignition System

CA-Centrifugal Advance
ECU-Electronic Control Unit
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

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 Catalyt

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

VEHICLE MODELS:

See Attached Pages

Engine: Front X Mid. ____ Rear ____

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

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19 88 AIR RESOURCES BOARD SUPPLEMENTAL DATA SHEET

Passenger Cars ____ Light-Duty Trucks X Medium-Duty Vehicles X Gas X Diesel ____

Manufacturer FORD MOTOR COMPANY

Engine Family JFM4.9T5HGG6

Liter (CID) 4.9L (300 CID)

Eng. Type I6

Emission Control Sys. and (Special Features) AIP/EGR/TWC/OC/OS (EFI)

Engine Code	Vehicle Models (if Coded, see Attachment) (Dyno Hp)	Trans. Type C5	Equiv. Test Weight	Ign. System (ECU) Part No. -12A650-	Fuel System EFI Part No. -9F593-	EGR Valve Part No. -9F483-	Catalyst Part No. -5F250-
851RR00B	F150 - 4x2			E8TF-AAA -AAB	E67E-BB	E8TE-CA E7TE-DA	E8TA-EA, EB, EC
	RC SWB	M5X390	4000				
	LWB	M5X572	4250				
		M5X390	4000				
	SC SWB	M5X390	4500				
	LWB	M5X30	4750				
	F250 4x2						
	RC LWB	M5X572	4500				
		M5X390	4500				
	F150 4x4						
	RC SWB	M5X572	4500				
		M5X390	4250				
	LWB	M5X572	4500				
		M5X390	4500				
	SC SWB	M5X390	4750				
	LWB	M5X390	5000				
	F250 4x4						
	RC LWB	M5X572	4750				

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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19 88 AIR RESOURCES BOARD SUPPLEMENTAL DATA SHEET

Passenger Cars ____ Light-Duty Trucks X Medium-Duty Vehicles X Gas X Diesel ____

Manufacturer FORD MOTOR COMPANY

Engine Family JFM4.9T5HGG6

Liter (CID) 4.9L (300 CID)

Eng. Type I6

Emission Control Sys. and (Special Features) AIP/EGR/TWC/OC/OS (EFI)

Engine Code	Vehicle Models (if Coded, see Attachment) (Dyno Hp)	Trans. Type C5	Equiv. Test Weight	Ign. System (ECU) Part No. -12A650-	Fuel System EFI Part No. -9F593-	EGR Valve Part No. -9F483-	Catalyst Part No. -5F250-
8-51R-R00B	Bronco 4x4	M5X572 M5X390	5000 5000	E8TE-AAA E8TE-AAB	E67E-BB	E8TE-CA E7TE-DA	E8TA-FA FB

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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19 88 AIR RESOURCES BOARD SUPPLEMENTAL DATA SHEET

Passenger Cars ____ Light-Duty Trucks X Medium-Duty Vehicles X Gas X Diesel ____

Manufacturer FORD MOTOR COMPANY

Engine Family JFM4.9T5HGG6

Liter (CID) 4.9L (300 CID)

Eng. Type I6

Emission Control Sys. and (Special Features) AIP/EGR/TWC/OC/OS (EFI)

Engine Code	Vehicle Models (if Coded, see Attachment) (Dyno Hp)	Trans. Type A3	Equiv. Test Weight	Ign. System (ECU) Part No. -12A650-	Fuel System EFI Part No. -9F593-	EGR Valve Part No. -9F483-	Catalyst Part No. -5F250-
752RR11B	F150 4x2 RC SWB	C6-029 C6-027	4000 4000	E8TF-CBA	E67E-BB	E7TE-CA E8TE-DA	E8TA-EA, EB, EC

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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19 88 AIR RESOURCES BOARD SUPPLEMENTAL DATA SHEET

Passenger Cars ____ Light-Duty Trucks ____ Medium-Duty Vehicles X Gas X Diesel ____

Manufacturer FORD MOTOR COMPANY

Engine Family JFM4.9T5HGG6

Liter (CID) 4.9L (300 CID)

Eng. Type I6

Emission Control Sys. and (Special Features) AIP/EGR/TWC/OC/OS (EFI)

Engine Code	Vehicle Models (if Coded, see Attachment) (Dyno Hp)	Trans. Type A3	Equiv. Test Weight	Ign. System (ECU) Part No. -12A650-	Fuel System EFI Part No. -9F593-	EGR Valve Part No. -9F483-	Catalyst Part No. -5F250-
752RR10B	F150 4x2 RC SWB	C6-029	4000	E8TF-BPA	E67E-BB	E8TE-DA or E7TE-CA	E8TA-EA, EB, EC
		C6-027	4000				
	RC LWB	C6-029	4250				
		C6-027					
	SC SWB	C6-027	4500				
	LWB	C6-027	4750				
	F250 4x2 RC LWB	C6-027	4500				
752QR00B	E150 Van RV SWB	C6-029	4500	E8TF-BVA			E8UA-GA
		C6-027	4500				
	LWB	C6-029	4500				
		C6-027	4500				
	SV LWB	C6-027	4750				
	E250 Van RV LWB	C6-027	5000				
	SV LWB	C6-027	5250				
	E150 Bus CW LWB	C6-027	5250				

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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19 88 AIR RESOURCES BOARD SUPPLEMENTAL DATA SHEET

Passenger Cars _____ Light-Duty Trucks X Medium-Duty Vehicles X Gas X Diesel ____

Manufacturer FORD MOTOR COMPANY Engine Family JFM4.9T5HGG6

Liter (CID) 4.9L (300 CID) Eng. Type I6

Emission Control Sys. and (Special Features) AIP/EGR/TWC/OC/OS (EPFI)

Engine Code	Vehicle Models	Trans. Type	Equiv. Test Weight	Ign. System (ECU) Part No. -12A650-	Fuel System EFI Bosch Part No. -9F593-	EGR Valve Part No. -9F483-	Catalyst Part No. -5F250-
		C4					
751RR08	F150 4x2	M4-632		E8TF-CMA	E67E-BB	E8TE-DA or E7TE-CA	E8TA-EA, EB, EC
	RC LWB		4250				
	F250 4x2						
	RC LWB		4500				
	F150 4x4						
	RC SWB		4500				
	LWB		4500				
	SC SWB		5000				
	LWB		5000				
	Bronco		5000				E8TA-FA, FB

PER R/C 4.9L -104

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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TRUCKLINE	ETW	Non A/C DPA	Non A/C THP	Non A/C CDT	A/C DPA	A/C THP	A/C CDT
F-150 (4x2)	3750	14.5	18.5	12.51	15.9	19.9	11.66
	3875	14.5	18.5	12.93	15.9	19.9	12.05
	4000	14.5	18.5	13.34	15.9	19.9	12.44
	4250*	14.5	18.5	14.17	15.9	19.9	13.22
	4500	14.5	18.5	15.00	15.9	19.9	14.00
	4750*	14.8	19.4	15.15	16.2	20.8	14.11
	5000	14.8	19.4	15.95	16.2	20.8	14.85
F-150 (4x4)	4250	15.9	21.3	12.35	17.3	22.5	11.68
	4500	15.9	21.3	13.07	17.3	22.5	12.37
	4750	15.9	21.3	13.80	17.3	22.5	13.05
	5000*	15.9R	21.3	14.53	17.3R	22.5	13.74
		18.6B	25.3	12.23	20.0B	26.7	11.59
	5250	15.9R	21.3	15.26	17.3R	22.5	14.39
		18.6B	25.3	12.84	20.0B	26.7	12.17
F-250 (4x2) LDT RC	4250	14.9	19.3	13.58	16.3	20.7	12.68
	4500	14.9	19.3	14.38	16.3	20.7	13.43
	4750*	14.9R	19.3	15.18	16.3R	20.7	14.18
		18.0B	23.0	12.77	19.4B	24.4	12.04
	5000	14.9R	19.3	15.98	16.3R	20.7	14.93
		18.0B	23.0	13.44	19.4B	24.4	12.67
HDT SC	5250	20.0(CB)		---	21.5(CB)		---
F-250 (4x4) LDT RC	4750	17.2	23.5	12.50	18.6	24.9	11.79
	5000*	17.2R	23.5	13.16	18.6R	24.9	12.41
	5250	17.2R	23.5	13.82	18.6R	24.9	13.03
	5500*	20.0B	27.1	12.53	21.4B	28.6	11.90
HDT SC	5500	20.0(CB)		---	21.5(CB)		---
Bronco	4750						
	5000*	14.2	20.1	15.35	15.6	21.6	14.32
	5250	14.2R	20.1	16.12	15.6R	21.6	15.04
	5250*	17.2B	25.9	12.51	18.6B	27.3	11.88
F-350 (4x2)							
SRW	5500	20.0(CB)		---	21.5(CB)		---
DRW	6000	22.0(CB)		---	23.5(CB)		---
CC SRW	6000* 46.2 Sq. Ft.	22.7	28.2	13.16	24.1	29.7	12.49

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TRUCKLINE	ETW	Non A/C DPA	Non A/C THP	Non A/C CDT	A/C DPA	A/C THP	A/C CDT
F-350 (4x2) CC DRW (4.9L)	7000* 84.6 sq. ft.	32.4	46.3	9.34	33.8	47.7	9.07
CC DRW (4.9L)	8000* 50.4 sq. ft.	24.1B	39.8	12.41	25.5B	41.2	11.99
		26.5R	38.4	12.87	27.9R	40.0	12.30
F-350 (4x4) SRW	6000	20.0(CB)		---	21.5(CB)		---
E-150	4250*	16.4	21.1	12.45	17.8	22.6	11.62
	4500	15.2	21.1	13.18	16.6	22.6	12.30
	4750	15.2	21.1	13.91	16.6	22.6	12.98
	5000	15.2	21.1	14.65	16.6	22.6	13.67
	5250*	15.2	21.1	15.38	16.6	22.6	14.35
	5500	15.2	21.1	16.11	16.6	22.6	15.03
E-250 Van	4750	15.9	23.1	12.70	17.3	24.7	11.91
	5000	15.9	23.1	13.37	17.3	24.7	12.54
	5250	15.9	23.1	14.04	17.3	24.7	13.16
	5500*	15.9R	23.1	14.71	17.3R	24.7	13.79
		19.5B(CB)		---	21.0B(CB)		---
	6000	15.9R	23.1	16.05	17.3R	24.7	15.04
		19.5B(CB)		---	21.0B(CB)		---
Club Wagon	5000						
	5500						
	6000	19.5(CB)		---	21.0(CB)		---
E-350 SWL/SVL	6000	20.0(CB)		---	21.5(CB)		---
CA SC SRW/DRW	7000* 77.9 sq. ft.	33.0	43.1	10.03	34.4	44.6	9.71

NOTES: (CB) - Cookbook
(E) - Estimated
* - Actual Coastdown Data

R - Radial Tire
B - Bias Tire

AEFEO 5-28-87
rw.38/rw