State of California
AIR RESOURCES BOARD

EXECUTIVE ORDER A-10-321
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 1987 model-year Ford Motor Company exhaust emission control systems are certified as described below for gasoline-powered light-duty trucks and medium-duty vehicles:

Engine Family	Displacement Cubic Inches (Liters)		Exhaust Emission Control Systems (Special Features)
HFM5.0T5HAGX	302	(5.0)	Air Injection - Pump Three-Way Catalyst Oxidation Catalyst Oxygen Sensor Exhaust Gas Recirculation (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
4000-5999	0.50	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
4000-5999	0.34	7.2	0.7

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.).

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 11th day of August, 1986.

Bob Grosso for

K. D. Drachand, Chief
Mobile Source Division

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1987 AIR RESOURCES BOARD SUPPLEMENTAL DATA SHEET

Manufacturer Ford Motor Company

Engine Family HFM5.0T5HAGX

Evaporative Family 7HM

Engine Type V8

Liters (CID) 5.0L (302)

ABBREVIATIONS

Ignition System

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

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
SPL-Smoke Puff Limiter or Throttle Delay
TOC-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 Fuel Injection
IC-Intercooler or aftercooler
MFI-Mechanical Fuel Injection
TC-Turbocharger

Fuel System

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

VEHICLE MODELS:

F-150 4x2
RC SWB, LWB
SC LWB

F-250 4x2
RC LWB

F-150 4x4
RC SWB, LWB
SC LWB

F-250 4x4
RC LWB

Bronco 4x4

E-150-Van
RV SWB, LWB
SV LWB

E-150-Bus
CW LWB

E-250-Van
RV LWB
SV LWB

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

Manufacturer Ford Motor Company Engine Family HFM5.0T5HAGX

Liter (CID) 5.0 (302) Eng. Type V8

Emission Control Sys. (Special Features) AIP/CL/EGR/COC/TWC (EFI, EEC)

Engine Code	Vehicle Models (If Coded see attachment) (Dyno Hp)#	Trans. Type A~~X~~-4	Equiv. Test Weight	Ign. System (ECU) EEC Part No. -12A650-	Fuel System Fuel Injector Assembly Part No. -9F593-	EGR Valve Part No. -9F483-	Catalyst Part No. -5F250-
754SR00A/N	F-150 4x2 RC SWB	A0X071	4000 4250*	E7TF-AYA	E5TE-AB E5TE-BB	E7TE-DC	E7TE-GA
	RC LWB		4250				
	SC SWB		4500				
	SC LWB		4500 4750*				
	F-250 4x2 RC LWB		4500				
754RR00A/N	F-150 4x4 RC SWB		4500	E7TF-AXA			
	F-150 4x4 RC LWB		4500				
	F-150 4x4 SC LWB		4750 5000*				

*With Air Conditioning. # See ~~Attached~~ Page 5 & 6

ments: See page one for abbreviations and evaporative emission family identification.
... refer to manufacturer's HP list for correct dyno test HP settings based on model and

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

Manufacturer Ford Motor Company Engine Family HFM5.0T5HAGX

Liter (CID) 5.0 (302) Eng. Type V8

Emission Control Sys. (Special Features) AIP/CL/EGR/COC/TWC (EFI, EEC)

Engine Code	Vehicle Models (If Coded see attachment) (Dyno Hp) #	Trans. Type L-4	Equiv. Test Weight	Ign. System (ECU) EEC Part No. -12A650-	Fuel System Fuel Injector Assembly Part No. -9F593-	EGR Valve Part No. -9F48s-	Catalyst Part No. -5F250-
54RR00A/N 54RR05A/N	F-250 4x4 RC LWB	AOX071	4750/5000	E7TF-AXA	E5TE-AB E5TE-BB	E7TE-DC	E7TA-GA
54RR10A/N 54RR11A/N	Bronco 4x4		5000 5250 *	E7TF-AXB (R11)			E7TA-JA
6(/N 754TR12A/N	E-150 RV SWB		4250 4500*	E7TF-AZA			E7VA-ABA
	RV LWB		4500 4750*	E7TF-AZC (R12)			
	E-150 SV LWB		4750 5000*				
	E-150 CW LWB		5000 5250				

See Attached Page

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

Manufacturer Ford Motor Company Engine Family HFM5.0T5HAGX

Liter (CID) 5.0L (302) Eng. Type V8

Emission Control Sys. (Special Features) AIP/CL/EGR/COC/TWC (EFI, EEC)

Engine Code	Vehicle Models (If Coded see attachment) (Dyno Hp) #	Trans. Type L-4	Equiv. Test Weight	Ign. System (ECU) EEC Part No. -12A650-	Fuel System Fuel Injector Assembly Part No. -9F593-	EGR Valve Part No. -9F483-	Catalyst Part No. -5F250-
754TR00A/N 754TR12A/N	E-250 RV LWB	AOX071	5000 5250*	E7TF-AZA E7TF-AZC (R12)	E5TE-AB E5TE-BB	E7TE-FA	E7UA-ABA
	E-250 SV LWB		5250 5500*				
754TR10A/N	E-150 RV SWB		4250/ 4500*	E7TF-AXA			
	RV LWB		4500/ 4750*				
	SV LWB		4750/ 5000*				
	CW LWB		5000/ 5250*				
	E-250 RV LWB		5000/ 5250*				
	SV LWB		5250/ 5500*				

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

Manufacturer Ford Motor Company Engine Family HFM5.0T5HAGX

Liter (CID) 5.0 (302) Eng. Type V8

Emission Control Sys. (Special Features) AIP/CL/EGR/COC/TWC (EFI, EEC)

Engine Code	Vehicle Models (If Coded see attachment) (Dyno Hp)#	Trans. Type L-4	Equiv. Test Weight	Ign. System (ECU) EEC Part No. -12A650-	Fuel System Fuel Injector Assembly Part No. -9F593-	EGR Valve Part No. -9F483-	Catalyst Part No. -5F250-
754SR00A/N 754SR05A/N	F-150 4x2 RC SWB	AOX071	4000/4250 4250*	E7TF-AYA	E5TE-AB E5TE-BB	E7TE-DC	E7TE-GA
754SR10A/N 754SR11A/N	RC LWB		4250				
	SC SWB		4500	E7TF-AYB (R11)			
	SC LWB		4500 4750*				
	F-250 4x2 RC LWB		4500/4750				
754RR00A/N 754RR05A/N	F-150 4x4 RC SWB		4500	E7TF-AXA			
754RR10A/N 754RR11A/N	F-150 4x4 RC LWB		4500/4750	E7TF-AXB (R11)			
	F-150 4x4 SC LWB		4750/5000 5000*				

*With Air Conditioning. # See Attached Page

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1987 DPA SETTINGS

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TRUCKLINE	ETW	Non A/C DPA	Non A/C CDT	A/C DPA	A/C CDT
F-150 (4x2)	3750	14.5	12.51	15.9	11.66
	3875	14.5	12.93	15.9	12.05
	4000	14.5	13.34	15.9	12.44
	4250*	14.5	14.18	15.9	13.22
	4500	14.8	14.35	16.2	13.37
	4750*	14.8	15.15	16.2	14.11
F-150 (4x4)	4250	15.9	12.35	17.3	11.68
	4500	15.9	13.07	17.3	12.37
	4750	15.9	13.80	17.3	13.05
	5000*	15.9R	14.53	17.3R	13.74
		18.6B	12.23	20.0B	11.59
F-250 (4x2) LDT RC	4250	14.9	13.58	16.3	12.68
	4500	14.9	14.38	16.3	13.43
	4750*	14.9R	15.18	16.3R	14.18
		18.0B	12.77	19.4B	12.04
HDT SC	5250	20.0(CB)	—	21.5(CB)	—
F-250 (4x4) LDT RC	4750	17.2	12.50	18.6	11.79
	5000*	17.2R	13.16	18.6R	12.41
	5250				
	5500*	20.0B	12.53	21.4B	11.90
HDT SC	5500	20.0(CB)	—	21.5(CB)	—
Bronco	4750				
	5000*	14.2R	15.35	15.6R	14.32
	5250*	17.2B	12.51	18.6B	11.88
F-350 (4x2) SRW	5500	20.0(CB)	—	21.5(CB)	—
DRW	6000	22.0(CB)	—	23.5(CB)	—
CC SRW	6000	26.8(CB)	—	28.2(CB)	—

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TRUCKLINE	ETW	Non A/C DPA	Non A/C CDT	A/C DPA	A/C CDT
F-350 (4x2) CC DRW (4.9L)	7000* 84.6 sq. ft.	32.4	9.34	33.8	9.07
CC DRW (4.9L)	8000* 50.4 sq. ft.	24.1	12.41	25.5	11.99
F-350 (4x4) SRW	6000	20.0(CB)	---	21.5(CB)	---
E-150	4250	15.2	12.45	16.6	11.62
	4500	15.2	13.18	16.6	12.30
	4750	15.2	13.91	16.6	12.98
	5000	15.2	14.65	16.6	13.67
	5250*	15.2	15.38	16.6	14.35
	5500	19.5(CB)	---	21.0(CB)	---
E-250 SVL	4750	15.9	12.70	17.3	11.91
	5000	15.9	13.37	17.3	12.54
	5250	15.9	14.04	17.3	13.16
	5500*	15.9R	14.71	17.3R	13.79
		18.0B	12.57	19.4B	11.96
	6000*	18.0B	13.71	19.4B	13.05
CWL	5000				
	5500				
	6000	19.5(CB)	---	21.0(CB)	---
E-350 SWL	6000	20.0(CB)	---	21.5(CB)	---
CA SC SRW/DRW	7000* 77.9 sq. ft.	33.0	10.03	34.4	9.71

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

R - Radial Tire
B - Bias Tire