State of California AIR RESOURCES BOARD

EXECUTIVE ORDER A-10-426 Relating to Certification of New Heavy-Duty Motor Vehicle Engines

FORD MOTOR COMPANY

Pursuant to the authority vested in the Air Resources Board by Sections 43100, 43102 and 43103 of the Health and Safety Code; and

Pursuant to the authority vested in the undersigned by Sections 39515 and 39516 of the Health and Safety Code and Executive Order G-45-3;

IT IS ORDERED AND RESOLVED: That the following Ford Motor Company 1990 model-year gasoline engines are certified for use in motor vehicles with a manufacturer's gross vehicle weight rating (GVWR) over 14,000 pounds:

Engine Family		splacement <u>(Cubic Inches)</u>	Exhaust Emission Control Systems
LFM07.0AGE9	7.0	(429)	Exhaust Gas Recirculation Secondary Air Injection

Engine models and codes are listed on attachments.

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

Hydrocarbons _gm/bhp-hr	Carbon Monoxide gm/bhp-hr	Nitrogen Oxides gm/bhp-hr
1.9	37.1	6.0

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

Engine Family	Hydrocarbons gm/bhp-hr	Carbon Monoxide gm/bhp-hr	Nitrogen Oxides gm/bhp-hr
LFM07.0AGE9	1.0	25.8	2.9

BE IT FURTHER RESOLVED: That the Executive Officer has been provided all material required to demonstrate certification compliance with the Board's emission control system warranty regulations (Title 13, California Code of Regulations, Section 2036 and California Health and Safety Code Section 43205.5).

Engines certified under this Executive Order must conform to all applicable California emission regulations.

FORD MOTOR COMPANY

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The Bureau of Automotive Repair will be notified by copy of this order and attachments.

Executed at El Monte, California this \mathcal{A}_{day}^{fh} day of July, 1989.

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K. D. Drachand, Chief Mobile Source Division

E.O.# A-10-426

1990 AIR RESOURCES BOARD SUPPLEMENTAL DATA SHEET

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Evaporative Family Regine Type	ManufacturerFord Motor Compa	Engine Family	LFM07.0	AGE9 (L7.0E)	
ABBREVIATIONS Ignition System Exhaust Emissions Control System Special Features CA-Centrifugal Advance ECU-Blectronic Control Unit ET-Blectronic Spark Advance Control VA-Vacuum Advance VR-Vacuum Retard AIP-Air Injection Pump AIV-Air Injection Valve ECR-Ekhaust Gas Recirculation EIC-Electronic Injection Control (Dissel Only) GFI-Central Fuel Injection or Infrostie Body Injection Pump Puel System DC-Drap Oxidizer, Continual TOP-Trap Oxidizer, Periodical DBC-Dual Bed Catalyst WUGC-Warm-Up Oxidation Catalyst WUGC-Warm-Up Oxidation Catalyst UWUG-Warm-Up Oxidation Catalyst	Evaporative Family <u>MR</u>		Engine Type	<u> </u>	
Ignition System Exhaust Emissions Control System Special Features CA-Centrifugal Advance ECU-Electronic Control Unit EI-Electronic Ignition AIP-Air Injection Pump AIV-Air Lipiction Valve EGR-Exhaust Gas Recirculation EGR-Exhaust Gas Recirculation SPL-Somoke Puff Limiter or Throttle Delay TOC-Trap Oxidizer, Continual TOP-Trap Oxidizer, Continual TOP-Trap Oxidizer, Continual TOP-Trap Oxidizer, Catalyst WUCC-Warm-Up Three-Way Catalyst OC-Oxidation Catalyst WUCC-Warm-Up Three-Way Catalyst OS-Oxygen Sensor HOS-Heated Oxygen Sensor SFI-Sequencial Ruel Injection DIP-Diesel Injection Direct DIP-Diesel Injection Direct DIP-Diesel Injection Direct OC-Combustion Chamb Valve OBD-On-Board Diagnostics MIL-Malfunction Indicator Light YEHICLE MODELS: F600, F700, F800 B600, B700 Rear 			Liters (CID)	<u>7.0L (</u>	429)
CA-Centrifugal Advance AIP-Air Injection Pump GFI-Central Fuel EU-Electronic Control Unit AIV-Air Injection Valve Injection or EXAC-Electronic Ignition EGE-Exhaust Gas Recirculation Injection or VA-Vacuum Advance UP-Air Injection Valve CFI-Central Fuel VA-Vacuum Retard EIC-Electronic Injection Control Ubesel Only VA-Vacuum Retard EM-Engine Modification FIEL-Smoke Puff Limiter or Throttle Delay TOC-Trap Oxidizer, Continual NPFI-Mechanical Port TOC-Trap Oxidizer, Continual TOC-Trap Oxidizer, Periodical BID-Diesel Injection DBC-Dual Bed Catalyst OC-Oxidation Catalyst BID-Diesel Injection WUTWC-Warm-Up Oxidation Catalyst UTWC-C-Warm-Up Oxidation Catalyst BID-Diesel Injection VUTWC-Warm-Up Oxidation Catalyst OS-Oxygen Sensor CC-Conbustion Chamb Fuel System CFI, EPFI, MPFI, SFI, DID, DIP, HOS, OS NU-Nariable Venturi Carburetor NU-Variable Venturi Carburetor VEHICLE MODELS: F600, F700, F800 Engine: Front XXX Mid Rear AWD Part Time Issue Date 6-28-89 20.17.02.00-1 Indicator Light	ABBREVIATIONS				
EU-Electronic Control Unit EI-Electronic Ignition ATV-Air Injection Valve EGR-Exhaust Gas Recirculation EGR-Exhaust Gas Recirculation Control Injection or Throttle Body Injection VA-Vacuum Advance VR-Vacuum Retard ATV-Air Injection Valve EGR-Exhaust Gas Recirculation Difference VR-Vacuum Retard Injection or Throttle Bolay VA-Vacuum Retard EM-Engine Modification SPI-Smoke Puff Limiter or Throttle Delay Injection or Throttle Delay TOC-Trap Oxidizer, Continual TOC-Trap Oxidizer, Periodical DBC-Dual Bed Catalyst MPFI-Mechanical Port Fuel Injection WUCC-Warm-Up Oxidizer, Periodical DBC-Naua Bed Catalyst DID-Diesel Injection Direct WUCC-Warm-Up Three-Way Catalyst WUWC-Warm-Up Three-Way Catalyst OS-Oxygen Sensor DIP-Diesel Injection OC-Turbooharger SC-Supercharger IC-Introcoler or Aftercooler CCV-Combustion Chamb Valve Fuel System CFI, EPFI, MPFI, SFI, DID, DIP, HOS, OS mV-nVenturi Carburetor Food Rear 	Ignition System	<u>Exhaust Emi</u>	<u>ssions Control</u>	System	Special Features
CFI, EPFI, MPFI, SFI, DID, DIP, HOS, OS OBD-On-Board NV-nVenturi Carburetor Diagnostics VV-Variable Venturi Carburetor MIL-Malfunction VEHICLE MODELS: F600, F700, F800 B600, B700 B600, B700 Engine: Front XXX Mid Rear Drive: FWD RWD XXX 4WD Full Time 4WD Part Time Issue Date 6-28-89 20.17.02.00-1 Revised 7-25-89 Diagnostics	ECU-Electronic Control Unit EI-Electronic Ignition ESAC-Electronic Spark Advance Control VA-Vacuum Advance VR-Vacuum Retard	AIV-Air In EGR-Exhaus EIC-Electr (Diese EM-Engine SPL-Smoke Thrott TOC-Trap C DBC-Dual B OC-Oxidat TWC-Three- WUOC-Warm-U WUTWC-Warm-U OS-Oxygen	jection Valve t Gas Recircula onic Injection 1 Only) Modification Puff Limiter of le Delay xidizer, Contin xidizer, Period ed Catalyst ion Catalyst Way Catalyst Way Catalyst p Oxidation Catalyst Sensor	Control c nual dical calyst	Injection or Throttle Body Injection EPFI-Electronic Port Fuel Injection MPFI-Mechanical Port Fuel Injection SFI-Sequential Fuel Injection DID-Diesel Injection Direct DIP-Diesel Injection Prechamber TC-Turbocharger SC-Supercharger IC-Intercooler or Aftercooler CCV-Combustion Chamb
B600, B700 Engine: Front XXX Mid Rear Drive: FWD RWD XXX 4WD Full Time 4WD Part Time Issue Date 6-28-89 20.17.02.00-1 Revised 7-25-89	CFI, EPFI, MPFI, SFI, DID, DIP, nV-nVenturi Carburetor	, HOS, OS			Diagnostics MIL-Malfunction
Revised 7-25-89	B600, B700 Engine: Front <u>XXX</u> Mid Rear Drive: FWD RWD <u>XXX</u> 4WD Full	1 Time 4WE			
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	Revised 7-25-89			<u></u>	

1990 AIR RESOURCES BOARD SUPPLEMENTAL DATA SHEET HEAVY DUTY ENGINES

		1990 AIR	RESOURCES BOAI HEAVY D	RD SUPPLEMENTAI JTY ENGINES		E.O. # <u>A-10</u>	- 426/ 427
	Menufactu	rer <u>Ford Motor</u>	Company	Engi	ine Family]	_FM07.0AGE9_	
		D) <u>6,1L (370 (</u>			Eng. Type	7-8	· · · · · · · · · · · · · · · · · · ·
		Control Sys. (Spe	•				
	Emission '	control sys. (spe	CIAL FEACULOS	/ <u></u>			
	Engine Code	Maximum Rated HP at RPM	Rated Torque at RPM	Ign. System (DIST) Part No. -12127-	Fuel System Part No. -9510-	EGR Valve Part No. -9H495-	Cata lyst Part No.
	8-87G-R10 (6.1L)	155 @ 3600	265 @ 2000	D9TE-AVA	E9HE-AA (2V)	E5TE-AB	NONE
	8-87H-R10 (7.0L)	200 @ 3600	326 @ 2600	D9TE-AVA	E8HE-AA (4V)	E5TE-AB	NONE
	0-87H-R10 (7.0L)	200 @ 3600	326 @ 2600	D9TE-AVA	E9HE-BA (4V)	E5TE-AB	NONE
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	Comments	See page one		ons and evapor	ative emission	family iden	tification
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	us Date	6-28-89	20).17.02.00-2	! 	! 	1
R	vised	7-25-89 10-26	-89 12-12-89			I .	
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