

State of California
AIR RESOURCES BOARD

EXECUTIVE ORDER A-10-422
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) of 8,501 to 14,000 pounds:

<u>Engine Family</u>	<u>Displacement Liters (Cubic Inches)</u>	<u>Exhaust Emission Control Systems</u>
LFM07.5BSA7	7.5 (460)	Exhaust Gas Recirculation Heated Oxygen Sensor Three-Way Catalyst Secondary Air Injection Multipoint Electronic Fuel Injection

Engine models and codes are listed on attachments.

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

<u>Hydrocarbons gm/bhp-hr</u>	<u>Carbon Monoxide gm/bhp-hr</u>	<u>Nitrogen Oxides gm/bhp-hr</u>
1.1	14.4	6.0

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

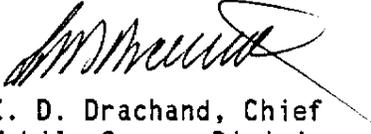
<u>Engine Family</u>	<u>Hydrocarbons gm/bhp-hr</u>	<u>Carbon Monoxide gm/bhp-hr</u>	<u>Nitrogen Oxides gm/bhp-hr</u>
LFM07.5BSA7	0.5	10.7	4.4

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.

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

Executed at El Monte, California this 18th day of July, 1989.


K. D. Drachand, Chief
Mobile Source Division

1990 AIR RESOURCES BOARD SUPPLEMENTAL DATA SHEET
HEAVY DUTY ENGINES

E.O. # A-10-422

Manufacturer Ford Motor Company Engine Family LFM07.5BSA7

Liter (CID) 7.5L (460 CID) Eng. Type V-8

Emission Control Sys. (Special Features) EGR/AIP/TWC/HOS/EPFI

Engine Code	Maximum Rated HP at RPM	Rated Torque at RPM	Ign. System (ECU)	Fuel System	EGR Valve	Catalyst
			Part No. -12A650-	Part No. -9F593-	Part No. -9F483-	Part No. -5E212-
8-97A-R10	218 @ 3600	363 @ 1800	E8TF-BLB	E8TE-BC	E7TE-GA	E8TA-LA
8-98A-R10	"	"	E8TF-BMB	"	"	"
9-98A-R00 R/C	"	"	E9TF-RA	"	"	"
7.5-HD-2						

Comments: See page one for abbreviations and evaporative emission family identification.

Date	JUN 07 1989		20.17.02.00-2				
Revised							

E.O.# A-10-422

1990 AIR RESOURCES BOARD SUPPLEMENTAL DATA SHEET

Manufacturer Ford Motor Company Engine Family LFM07.5BSA7 (L7.5A)
 Evaporative Family 9HN Engine Type V-8
 Liters (CID) 7.5L (460)

ABBREVIATIONS

Ignition System

CA-Centrifugal Advance
 ECU-Electronic Control Unit
 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
 EGR-Exhaust Gas Recirculation
 EIC-Electronic Injection Control (Diesel Only)
 EM-Engine Modification
 SPL-Smoke Puff Limiter or Throttle Delay
 TOC-Trap Oxidizer, Continual
 TOP-Trap Oxidizer, Periodical
 DBC-Dual Bed Catalyst
 OC-Oxidation Catalyst
 TWC-Three-Way Catalyst
 WUOC-Warm-Up Oxidation Catalyst
 WUTWC-Warm-Up Three-Way Catalyst
 OS-Oxygen Sensor
 HOS-Heated Oxygen Sensor

Special Features

CFI-Central Fuel 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 Chamber Valve
 OBD-On-Board Diagnostics
 MIL-Malfunction Indicator Light

Fuel System

CFI, EPFI, MPFI, SFI, DID, DIP, HOS, OS
 nV-nVenturi Carburetor
 VV-Variable Venturi Carburetor

VEHICLE MODELS: E250/E350/Stripped or Cutaway
 F250/F350

Engine: Front XXX Mid Rear
 Drive: FWD RWD XXX 4WD Full Time 4WD Part Time

Issue Date	JUN 07 1989	20.17.02.00-1					
Revised							