

State of California
AIR RESOURCES BOARD

EXECUTIVE ORDER A-10-542
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 1993 model Otto-cycle engine is certified for use in motor vehicles with a manufacturer's gross vehicle weight rating (GVWR) of 8,501 to 14,000 pounds:

Fuel Type: Gasoline

<u>Engine Family</u>	<u>Liters (Cubic Inches)</u>	<u>Exhaust Emission Control Systems and Special Features</u>
PFM07.5BSA3	7.5 (460)	Secondary Air Injection Exhaust Gas Recirculation Heated Oxygen Sensor Multiport Fuel Injection Three Way Catalytic Converter

Engine models and codes are listed on attachments.

The following are the certification emission standards for this engine family in grams per brake-horsepower-hour:

<u>Total Hydrocarbons</u>	<u>Carbon Monoxide</u>	<u>Nitrogen Oxides</u>
1.1	14.4	5.0

The following are the certification emission values for this engine family in grams per brake-horsepower-hour:

<u>Engine Family</u>	<u>Total Hydrocarbons</u>	<u>Carbon Monoxide</u>	<u>Nitrogen Oxides</u>
PFM07.5BSA3	0.2	13.2	4.1

BE IT FURTHER RESOLVED: That for the listed engine models, the manufacturer has submitted the materials to demonstrate certification compliance with the Board's emission control system warranty provisions (Title 13, California Code of Regulations, Section 2035 et. seq.).

FORD MOTOR COMPANY

EXECUTIVE ORDER A-10-542
(Page 2 of 2)

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 20th day of January, 1993.



R. B. Summerfield
Assistant Division Chief
Mobile Source Division

1993 AIR RESOURCES BOARD SUPPLEMENTAL DATA SHEET
HEAVY DUTY ENGINES

Manufacturer Ford Motor Company Engine Family PFM07.5BSA3 (P7.5A)

Liters (CID) 7.5L (460) Fuel Type Gasoline Engine Config. V-8

Emission Control Sys. (Special Features) AIR/EGR/HO2S/MFI/TWC
(Use abbreviations per SAE J1930 Jun88)

Engine Code	Rated HP @ RPM	Ign. System or PCME	Fuel System	EGR Valve	Catalyst
		Part No. -12A650-	Part No. -9F593-	Part No. -9F483-	Part No. -5E212-
3-97A-R00	245 @ 4200	F3TF-DA	F1TE-DA	F3TE-AA	E3TA-FC
3-98A-R00	245 @ 4200	F3TF-KA	F1TE-DA	F3TE-AA	E3TA-FC
3-98E-R00	245 @ 4200	F3TF-JA	F1TE-DA	F3TE-AA	E3TA-FC
3-98F-R00	245 @ 4200	F3TF-FA	F1TE-DA	F3TE-AA	E3TA-FC

Comments: See 20.09.17.02-1 for abbreviations and 20.09.17.02-4 for evaporative emission family identification.

Engine Family: P7.5A

Issue Date: NOV 30 1992

20.09.17.02-2

Revised:

20091702.2

1993 AIR RESOURCES BOARD SUPPLEMENTAL DATA SHEET

Manufacturer Ford Motor Company Engine Family PFM07.5BSA3 (P7.5A)
 Evaporative Family HN Engine Type V-8
 Liters (CID) 7.5L (460)

ABBREVIATIONS:

<u>Ignition System</u>	<u>Exhaust Emissions Control System</u>	<u>Fuel System</u>
PCM-Powertrain Control Module	AIRD-Secondary Air Injection	DFI-Direct Fuel Injection (Diesel)
	ECT-Engine Coolant Temp Sensor	EIC-Electronic Injection Control (Diesel)
	EGR-Exhaust Gas Recirculation	CAC-Charged Air Intercooler or Aftercooler
	EM-Engine Modification	IFI-Indirect Diesel Fuel Injection
	HO2S-Heated Oxygen Sensor	MPI-Multipoint Electronic Fuel Injection
	KS-Knock Sensor	SC-Supercharged
	MAP-Manifold Absolute Pressure Sensor	SFI-Sequential Multipoint Electronic Fuel Injection
	OC-Oxidation Catalyst	TAA-Turbocharged, Air to Air (Diesel)
	O2S-Oxygen Sensor	TAW-Turbocharged, Air to Air to Water (Diesel)
<u>Special Features</u>	TAB-Secondary Air Inj. Bypass	TBI-Throttle Body Electronic Fuel Injection
MIL-Malfunction Indicator Lamp	TAD-Secondary Air Inj. Diverter	
OBD-On Board Diagnostics	SPL-Smoke Puff Limiter	
	TOC-Trap Oxidizer: Continuous	
	TOP-Trap Oxidizer: Periodic	
	TPS-Throttle Position Sensor	
	TWC-Three Way Catalyst	
	TWC+OC-Three Way Catalyst Plus Oxidation Catalyst	
	WU-OC-Warm Up Oxidation Catalyst	
	WU-TWC-Warm Up Three Way Catalyst	

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

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

Engine Family: P7.5A

Issue Date: NOV 3 0 1992

20.09.17.02-1

Revised:

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