

State of California
AIR RESOURCES BOARD

EXECUTIVE ORDER A-10-389
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 1989 model-year gasoline engines are certified for use in motor vehicles with a manufacturer's gross vehicle weight rating (GVWR) over 14,000 pounds.

| <u>Engine Family</u> | <u>Displacement</u> <u>Liters (Cubic Inches)</u> | | <u>Exhaust Emission Control Systems</u> <u>(Special Features)</u> |
|----------------------|---|-------|--|
| KFM07.5AGE8 | 7.0 | (429) | Exhaust Gas Recirculation Air Injection Pump |
| | 6.1 | (370) | |

Engine models and codes are listed on attachments.

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

| <u>Hydrocarbons</u> <u>gm/bhp-hr</u> | <u>Carbon</u> <u>Monoxide</u> <u>gm/bhp-hr</u> | <u>Nitrogen Oxides</u> <u>gm/bhp-hr</u> |
|---|--|--|
| 1.9 | 37.1 | 6.0 |

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

| <u>Engine Family</u> | <u>Hydrocarbons</u> <u>gm/bhp-hr</u> | <u>Carbon</u> <u>Monoxide</u> <u>gm/bhp-hr</u> | <u>Nitrogen Oxides</u> <u>gm/bhp-hr</u> |
|----------------------|---|--|--|
| KFM07.5AGE8 | 1.2 | 25.8 | 4.6 |

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 Administrative Code, Section 2036).

FORD MOTOR COMPANY

EXECUTIVE ORDER A-10-389
(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 22nd day of July, 1988.



K. D. Drachand, Chief
Mobile Source Division

1989 AIR RESOURCES BOARD SUPPLEMENTAL DATA SHEET

Manufacturer Ford Motor Company Engine Family KFM07.5AGE8 (K7.5E)
 Evaporative Family 9HN Engine Type V-8
 Liters (CID) 7.5L (460)

ABBREVIATIONS

| <u>Ignition System</u> | <u>Exhaust Emissions Control System</u> | <u>Special Features</u> |
|---------------------------------------|--|---|
| CA-Centrifugal Advance | AIP-Air Injection Pump | CFI-Central Fuel Injection or Throttle Body Injection |
| ECU-Electronic Control Unit | AIV-Air Injection Valve | EPFI-Electronic Port Fuel Injection |
| EI-Electronic Ignition | EGR-Exhaust Gas Recirculation | MPFI-Mechanical Port Fuel Injection |
| ESAC-Electronic Spark Advance Control | EIC-Electronic Injection Control (Diesel Only) | SFI-Sequential Fuel Injection |
| VA-Vacuum Advance | EM-Engine Modification | DID-Diesel Injection Direct |
| VR-Vacuum Retard | SPL-Smoke Puff Limiter or Throttle Delay | DIP-Diesel Injection Prechamber |
| | TOC-Trap Oxidizer, Continual | TC-Turbocharger |
| | TOP-Trap Oxidizer, Periodical | SC-Supercharger |
| | DBC-Dual Bed Catalyst | IC-Intercooler or Aftercooler |
| | OC-Oxidation Catalyst | CCV-Combustion Chamber Valve |
| | TWC-Three-Way Catalyst | OBD-On-Board Diagnostics |
| | WUOC-Warm-Up Oxidation Catalyst | MIL-Malfunction Indicator Light |
| | WUTWC-Warm-Up Three-Way Catalyst | |
| | OS-Oxygen Sensor | |
| | HOS-Heated Oxygen Sensor | |

Fuel System

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

VEHICLE MODELS: F600, F700, F800
 B600, B700

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

| | | | | | | | |
|------------|--------|---------|--|--|--|--|--|
| Issue Date | 7-1-88 | 17.02-1 | | | | | |
| Revised | | | | | | | |

1989 AIR RESOURCES BOARD SUPPLEMENTAL DATA SHEET
HEAVY DUTY ENGINES

E.O. # A-10-389

Manufacturer Ford Motor Company Engine Family KFM07.5AGE8
 Liter (CID) 7.5L (460 CID), 6.1L (370), 7.0L (429) Eng. Type V-8
 Emission Control Sys. (Special Features) EGR/AIP

| Engine Code | Maximum Rated HP at RPM | Rated Torque at RPM | Ign. System (ECU) | Fuel System | EGR Valve | Catalyst |
|---------------------------------|-------------------------|-----------------------|--------------------|-----------------------------|--------------------------------|-----------------|
| | | | Part No. -12127- | Part No. -9510- | Part No. SEE BELOW | Part No. |
| 8-83G-R00 (6.1L) | 155 @ 3600 | 265 @ 2000 | E5HE-BA | E5HE-TC (2V) | E5TE-AB -9H495- | NONE |
| 8-87H-R10 (7.0L) | 200 @ 3600 | 326 @ 2600 | E9TE-AVA | E8HE-AA (4V) | E5TE-AB -9H495- | NONE |
| 6-98J-R16 (7.5L) | 220 @ 4000 | 360 @ 2600 | E3HE-BA | E6JL-AB (4V) | E2EE-AA -9D475- | NONE |

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

| | | | | | | | |
|------------|--------|---------|--|--|--|--|--|
| Issue Date | 7-1-88 | 17.02-2 | | | | | |
| Revised | | | | | | | |