State of California AIR RESOURCES BOARD

EXECUTIVE ORDER A-10-310 Relating to Certification of New Motor Vehicle Heavy-Duty 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 1987 model-year diesel engines have shown compliance with the optional transient test procedure and standards and are certified for use in motor vehicles with a manufacturer's gross vehicle weight rating greater than 8500 pounds:

| Engine Family | Displacement Cubic Inches (Liters) | Exhaust Emission Control Systems (Special Features) | | |
|---------------|---------------------------------------|--|--|--|
| HFM07.8FPB4 | 474 (7.8) | (Aftercooler) (Turbocharger) | | |

Engine models and codes are listed on attachments.

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 |
|---------------|---------------------------|---------------------------------|------------------------------|
| HFM07.8FPB4 | 1.1 | 2.2 | 4.7 |

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).

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.

Executed at El Monte, California this

day of February, 1986

K. D. Drachand, Chief Mobile Source Division

1987 AIR RESOURCES BOARD SUPPLEMENTAL DATA SHEET HEAVY-DUTY DIESEL ENGINES

| Manufacturer Ford Motor Company | | | Page 1 | | |
|--|--|---|--------------------------------|---|-----------------|
| Engine Family HFM07.8FPB4 CID(Liter)-Type_ | | | | pe <u>474(7.8L)</u> - | - 16 |
| ECS and (Specia | al Features)SPL (t | urbo, ATA aftero | ooler) | | |
| Engine Model | Fuel Injection Pump Mfr. Bosch Part Number -9A543- | Injector Mfr. Bosch Part Number -9F593- | Maximum Rated HP and RPM | Fuel Rate at Maximum HP mm ³ /stroke | Label Ident. |
| 225C | E5HN-DA | Е5НМ-ВА | 225 @ 2600 rpm | 111 | |
| | | | | | |
| | | | | | |

Date of Issue -

| E.O.# | A-10-310 |
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1987 AIR RESOURCES BOARD SUPPLEMENTAL DATA SHEET HEAVY-DUTY DIESEL ENGINES

| Manufacturer | acturer FORD MOTOR COMPANY | | | Engine Family HFM07.8FPB4 | | | |
|---|--|---|-------------------------------|--|--------------------------------------|--|--|
| Liter (CID) | 7.8L(474) | | | Eng. Type 16 | | | |
| Emission Control Sys. and (Special Features) SPL (turbo, ATA aftercooler) | | | | | | | |
| (Calibration) Engine Model | Fuel Injection Pump Mfr. Bosch Part Number -9A543- | Injector Mfr. Bosch Part Number -9F593- | Maximum Rated HP at RPM | Fuel Rate mm ³ /stroke (lbs/Hr) | Maximum Rated Torque at RPM | Fuel Rate mm ³ /stroke (lbs/Hr) | |
| (7-85N-R00) 225C | E5HN-DA | E5HN-BA | 225 @ 2600 | 111 | 604 @ 1400 | 117 | |
| (7-85N-R01) 225C | E5HN-EE | Е5Н N−ВА | 225 @ 2400 | 112 | 604 @ 1400 | 117 | |
| | | | | | | | |

Revisions:

of Issue

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