State of California AIR RESOURCES BOARD

EXECUTIVE ORDER A-27-34
Relating to Certification of New Motor Vehicle Engines

MACK TRUCKS, INC.

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 Mack Trucks, Inc. 1982 model-year diesel engines 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) | | |
|---------------|---------------------------------------|---|--|--|
| 10 | 998 (16.4) | <pre>(Acceleration Smoke Puff Limiter) (Intercooled) (Turbocharged)</pre> | | |

Engine Models and Codes as listed on attachments.

Section 43200, Part 5, Division 26 of the California Health and Safety Code requires that the engine manufacturer furnish a decal with each engine sold or delivered to a vehicle manufacturer. The decal shall display the applicable model year heavy-duty engine exhaust emission standards and the following certification emission values:

| Engine Family | Hydrocarbons gm/bhp-hr | Carbon Monoxide gm/bhp-hr | Nitrogen Oxides gm/bhp-hr |
|---------------|---------------------------|---------------------------------|---------------------------|
| 10 | 0.2 | 1 | 5.9 |

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 Administrative Code, Section 2036).

MACK TRUCKS, INC.

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 attachment.

Executed at El Monte, California this 5 day of November, 1981.

K. D. Drachand, Chief
Mobile Source Control Division

1982 AIR RESOURCES BOARD SUPPLEMENTAL DATA SHEET HEAVY-DUTY DIESEL ENGINES

| Manufacturer Mack Trucks, Inc. | | | Page 1 | | | | | |
|--|---|-----------------------------------|--------------------------------|--|-----------------|--|--|--|
| Engine Famil y _ | Engine Family 10CID(Liter)-Type 998 V-8 | | | | | | | |
| ECS(Special Features) (Acceleration Smoke Puff Limiter, Turbocharged, Intercooled) | | | | | | | | |
| Engine Model | Fuel Injection Pump Mfr. Part Number | Injector Mfr. Part Number | Maximum Rated HP and RPM | Fuel Rate at Maximum 3HP nm ³ /stroke | Label Ident. | | | |
| EMC9-400 | American Bosch 313GCA 5133-P6 | American Bosch 114GC 39-P10 | 392 @ 2100 | 170.4 | EMC9-400 | | | |
| EMC9-400R (1900) | American Bosch 313 GCA 5133-P10 | | 400 @ 1900 | 177.0 | EMC9-400R | | | |
| EMC9-400R (1700) | American Bosch 313GCA 5133-P32 or 5133-P28 | | 400 @ 1700 | 186.9 | | | | |
| EC9-440 ⁽¹⁾ | American Bosch 313GCA 5155-P22 | American Bosch 114GC 39-P15 | 400 @ 1800 | 197.3 | EC9-440 | | | |
| | | | | | | | | |

Date of Issue - 110581

⁽¹⁾ Added by request No. 1982-10-1 on 071582.