

State of California  
AIR RESOURCES BOARD

EXECUTIVE ORDER A-27-27  
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. 1980 model-year diesel engines are certified for use in motor vehicles with a manufacturer's gross vehicle weight rating greater than 8500 pounds:

| <u>Engine Family</u> | <u>Displacement<br/>Cubic Inches</u> | <u>Exhaust Emission Control Systems<br/>(Special Features)</u>       |
|----------------------|--------------------------------------|--|
| 10                   | 998                                  | (Acceleration Smoke Puff Limiter)<br>(Intercooled)<br>(Turbocharged) |

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:


| <u>Engine Family</u> | <u>Hydrocarbons<br/>gm/bhp-hr</u> | <u>Carbon<br/>Monoxide<br/>gm/bhp-hr</u> | <u>Hydrocarbons +<br/>Nitrogen Oxides<br/>gm/bhp-hr</u> |
|----------------------|-----------------------------------|--|---|
| 10                   | 0.2                               | 1  | 5.9   |

BE IT FURTHER RESOLVED: That Mack Trucks, Inc. has provided to the Executive Officer 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 and attachment.

Executed at El Monte, California this 6<sup>th</sup> day of December, 1979.

  
K. D. Drachand, Acting Chief  
Mobile Source Control Division

1980 AIR RESOURCES BOARD SUPPLEMENTAL DATA SHEET  
HEAVY-DUTY DIESEL ENGINES

Manufacturer Mack Trucks, Inc. Page 1

Engine Family 10 CID-Type 998 V-8

ECS(Special Features) (Acceleration Smoke Puff Limiter, Turbocharged, Intercooled)

| Engine Model                              | Fuel Injection Pump<br>Mfr.<br>Part Number | Injector<br>Mfr.<br>Part Number   | Maximum<br>Rated HP<br>and RPM | Fuel Rate<br>at<br>Maximum<br>HP<br>mm <sup>3</sup> /stroke | Label<br>Ident.                        |
|---|--|-----------------------------------|--------------------------------|---|--|
| ETCX(B)1000                               | American Bosch<br>313GCA<br>5133-P10       | American Bosch<br>114GC<br>39-P10 | 400 @<br>1900                  | 177.0   | ETCX1000                               |
| ETCX(B)1005A<br>(EMC9-400) <sup>(1)</sup> | American Bosch<br>313GCA<br>5133-P6        |                                   | 392 @<br>2100                  | 170.4   | ETCX1005A<br>(EMC9-400) <sup>(1)</sup> |
| EMC9-400R <sup>(2)</sup>                  | American Bosch<br>313GC<br>5133-P28        |                                   | 400 @<br>1700                  | 186.9   | EMC9-400R                              |

Date of Issue - (1) New engine model designation-effective 4/3/80.  
(2) Addition of engine per request # 1980-10-1.