

State of California  
AIR RESOURCES BOARD

EXECUTIVE ORDER A-272-2  
Relating to Certification of New Heavy-Duty Motor Vehicle Engines

ONAN CORPORATION

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 Onan Corporation 1987 model-year diesel engines have shown compliance with the transient test procedures and standards and are certified for use in motor vehicles with a manufacturer's gross vehicle weight rating (GVWR) of 8,500 to 14,000 pounds:

| <u>Engine Family</u> | <u>Displacement<br/>Cubic Inches (Liters)</u> | <u>Exhaust Emission Control Systems<br/>(Special Features)</u>      |
|----------------------|-----------------------------------------------|---------------------------------------------------------------------|
| HNA03.4EPA4          | 210 (3.43)                                    | Diesel Injection-Prechamber<br>Smoke Puff Limiter<br>(Turbocharger) |

Engine models and codes are listed on attachments.

The following are the certification emission values for these engine families:

| <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> |
|----------------------|-----------------------------------|------------------------------------------|---------------------------------------------------------|
| HNA03.4EPA4          | 0.5                               | 2.7                                      | 4.8                                                     |

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 20<sup>th</sup> day of January, 1987.



K. D. Drachand, Chief  
Mobile Source Division

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

Manufacturer Onan Corporation Engine Family HNA034EPA4  
 Liter (CID) 3.434 (210) Eng. Type In-line, 6 cylinders  
 Emission Control Sys. and (Special Features) DIP (TC), SPL

| Engine Model  | Fuel Injection Pump Mfr. Part Number | Injector Mfr. Part Number | Maximum Rated HP at RPM | Fuel Rate mm <sup>3</sup> /stroke (lbs/Hr) | Maximum Rated Torque at RPM | Fuel Rate mm <sup>3</sup> /stroke (lbs/Hr) |
|---------------|--------------------------------------|---------------------------|-------------------------|--------------------------------------------|-----------------------------|--------------------------------------------|
| L634T-A       | Robert Bosch                         | Robert Bosch              |                         |                                            |                             |                                            |
| <u>CPL #s</u> |                                      |                           |                         |                                            |                             |                                            |
| 004           | 147-0465-15                          | 147-0662                  | 120 @ 3600              | 50.3 (61.1)                                | 221@2000                    | 54.3 (36.6)                                |
| 002, 005      | 147-0465-16                          | 147-0662                  | 112 @ 2800              | 54.2 (51.3)                                | 221@2000                    | 54.3 (36.6)                                |
| 003, 006      | 147-0465-18                          | 147-0662                  | 102 @ 3600              | 43.8 (53.1)                                | 187@2000                    | 46.0 (31.1)                                |
| 007           | 147-0465-19                          | 147-0723-02               | 108 @ 2800              | 54.2 (51.3)                                | 221@2000                    | 54.3 (36.6)                                |

Date of Issue 12/31/86 Revisions: