

State of California
AIR RESOURCES BOARD

EXECUTIVE ORDER A-4-128
Relating to Certification of New Heavy-Duty Motor Vehicle Engines

NAVISTAR INTERNATIONAL TRANSPORTATION 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 Navistar International Transportation Corporation 1989 model-year diesel engines are certified for use in motor vehicles with a manufacturer's gross vehicle weight rating (GVWR) over 8,500 pounds:

| <u>Engine Family</u> | <u>Displacement</u> <u>Liters (Cubic Inches)</u> | | <u>Exhaust Emission Control Systems</u> <u>(Special Features)</u> |
|----------------------|---|-------|--|
| KNV0466FPA7 | 7.6 | (466) | (Diesel Injection - Direct) (Turbocharger) (Intercooler) |

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 Monoxide</u> <u>gm/bhp-hr</u> | <u>Nitrogen Oxides</u> <u>gm/bhp-hr</u> | <u>Particulates</u> <u>gm/bhp-hr</u> |
|---|--|--|---|
| 1.3 | 15.5 | 6.0 | 0.60 |

The following are the certification emission values for this engine family, except that compliance with the carbon monoxide emission standard has been demonstrated pursuant to the Code of Federal Regulations, Title 40, Part 85, Subpart A, Section 86.088-23(c)(2)(1):

| <u>Engine Family</u> | <u>Hydrocarbons</u> <u>gm/bhp-hr</u> | <u>Nitrogen Oxides</u> <u>gm/bhp-hr</u> | <u>Particulates</u> <u>gm/bhp-hr</u> |
|----------------------|---|--|---|
| KNV0466FPA7 | 0.6 | 5.0 | 0.47 |

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 Code of Regulations, 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 attachments.

Executed at El Monte, California this 14th day of November, 1988.

Original signed by KDD

K. D. Drachand, Chief
Mobile Source Division

1989 AIR RESOURCES BOARD SUPPLEMENTAL DATA SHEET
 HEAVY-DUTY DIESEL ENGINES

Manufacturer Navistar International Transportation Corp. Engine Family (KNV0466FPA7) DTA-466
 Liter (CID) 7.6 (466) Engine Type Four Stroke, I-6
 Emission Control Sys. and (Special Features) SPL (DID, TC, IC)

| Engine Model | Fuel Injection Pump Mfr. Part Number | Injector Mfr. Part Number | Maximum Rated HP at RPM | Fuel Rate mm ³ /stroke (lbs/hr) | Maximum Rated Torque at RPM | Fuel Rate mm ³ /stroke (lbs/hr) |
|--------------|--------------------------------------|---------------------------|-------------------------|--|-----------------------------|--|
| D240C | Robert Bosch 1811767C91 | U.T.D.S. 1806407C91 | 240 @ 2400 | 117.4 (94.4) | 630 @ 1600 | 124.4 (66.7) |
| D210C | Robert Bosch 1811766C91 | U.T.D.S. 1806407C91 | 210 @ 2400 | 103.2 (83.0) | 555 @ 1600 | 107.5 (57.6) |

Date of Issue 17.00pp8

Revisions:

17.00 -8 DTA-466