

State of California
AIR RESOURCES BOARD

EXECUTIVE ORDER A-4-196

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-45-9;

IT IS ORDERED AND RESOLVED: That the following 1997 model-year Navistar International Transportation Corporation diesel-cycle engines are certified for use in motor vehicles with a manufacturer's gross vehicle weight rating (GVWR) over 14,000 pounds:

Fuel Type: Diesel

| <u>Engine Family</u> | <u>Engine Displacement Liters (Cubic Inches)</u> | <u>Exhaust Emission Control Systems and Special Features</u> |
|----------------------|--|--|
| VNV530D6DARA | 8.7 (530) | Turbocharger Charge Air Cooler Smoke Puff Limiter |

Engine models and codes are listed on attachments.

The following are the certification exhaust emission standards for this engine family in grams per brake horsepower-hour:

| <u>Hydrocarbons</u> | <u>Carbon Monoxide</u> | <u>Nitrogen Oxides</u> | <u>Particulates</u> |
|---------------------|----------------------------|----------------------------|---------------------|
| 1.3 | 15.5 | 5.0 | 0.10 |

The following are the certification exhaust emission values for this engine family in grams per brake horsepower-hour:

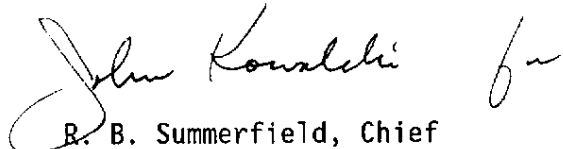
| <u>Engine FAMILY</u> | <u>Hydrocarbons</u> | <u>Carbon Monoxide</u> | <u>Nitrogen Oxides</u> | <u>Particulates</u> |
|--------------------------|---------------------|----------------------------|----------------------------|---------------------|
| VNV530D6DARA | 0.2 | 2.0 | 5.0 | 0.07 |

BE IT FURTHER RESOLVED: That for the listed engine models, the manufacturer has submitted the materials to demonstrate certification compliance with the Board's emission control system warranty provisions (Title 13, California Code of Regulations, Section 2035 et seq.).

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 30th day of October 1996.


R. B. Summerfield, Chief
Mobile Source Operations Division

1997 AIR RESOURCES BOARD SUPPLEMENTAL DATA SHEET
HEAVY-DUTY DIESEL-STANDARD ENGINES

Page 1

Manufacturer Navistar International Transportation Corp. Engine Family VNV530D6DARA (530Med)Displacement : 8.7 / Liters 530 / Cubic InchesIgnition: Compression X Compression with Glow Plug Spark Fuel Type(s) Dedicated X Flex-Fuel Dual-Fuel Bi-Fuel Diesel X CNG LNG LPG M85 M100 Other (specify) Diesel Cert Fuel: 13 CCR 2282 40 CFR 86.1313-90 40 CFR 86.1313-94 XMaximum Rated Power: 275 HP @ 2000 RPM Engine Configuration I-6Exhaust ECS (include. MFI, TC, CAC) : EM DI TC CAC SPL
(Use abbreviations per SAE J1930 SEP91)

| Engine Mode (Eng. Code) | Rated HP @ RPM | Fuel Rate @ Rated HP mm ³ / stroke (lbs/hr) | Fuel Pump & Injector Part No. | ECM / PCM Part No. | EGR Valve Part No. | PTOX / Catalytic Converter Part No. |
|------------------------------|-------------------|---|-------------------------------------|----------------------------|--------------------------|--|
| A275 | 275 @ 2000 | 153.9 (103.1) | Injection Pumps 1823153C91 | Fuel Nozzles 1823763C91 | | |
| AF275 | 275 @ 2000 | 151.8 (101.7) | 1823152C91 | 1823763C91 | | |
| AL275 | 275 @ 2000 | 151.8 (101.7) | 1823959C91 | 1823763C91 | | |
| A250 | 250 @ 2000 | 138.0 (92.5) | 1823151C91 | 1823759C91 | | |

Date Issued : 10/3/96

Revisions :