

State of California
AIR RESOURCES BOARD

EXECUTIVE ORDER A-4-122

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 1988 model-year diesel engines are certified for use in motor vehicles with a manufacturer's gross vehicle weight rating over 8,500 pounds:

| <u>Engine Family</u> | <u>Displacement Liters (Cubic Inches)</u> | <u>Exhaust Emission Control Systems (Special Features)</u> |
|----------------------|-----------------------------------------------|----------------------------------------------------------------|
| JNV0360FPA0 | 5.9 (360) | (Diesel Injection - Direct) (Turbocharger) (Intercooler) |

Engine models and codes are listed on attachments.

The following are emission standards for this engine family except that the demonstration for meeting the carbon monoxide standard has been waived per Subpart A, Part 86, Title 40, Code of Federal Regulations, Section 86.088-23(c)(2)(i):

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

The following are the certification emission values for this engine family:

| <u>Engine Family</u> | <u>Hydrocarbons gm/bhp-hr</u> | <u>Nitrogen Oxides gm/bhp-hr</u> | <u>Particulates gm/bhp-hr</u> |
|----------------------|-----------------------------------|--------------------------------------|-----------------------------------|
| JNV0360FPA0 | 0.8 | 5.9 | 0.53 |

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 23rd day of November, 1987.



K. D. Drachand, Chief
Mobile Source Division

1988 AIR RESOURCES BOARD SUPPLEMENTAL DATA SHEET
 HEAVY-DUTY DIESEL ENGINES

Manufacturer Navistar International Transportation Corp. Engine Family JNV0360FPA0
 Liter (CID) 5.9 (360) DTA-466
 Emission Control Sys. and (Special Features) SPL (DID, IC, TC) Engine Type Four Stroke, I-6

| 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) |
|--------------|--------------------------------------|----------------------------|-------------------------|--------------------------------------------|-----------------------------|--------------------------------------------|
| B175C | Robert Bosch 1811836C91,C92 | Robert Bosch 1812509C91 | 175 @ 2700 | 80.2 (72.5) | 419 @ 1700 | 86.9 (49.5) |

Date of Issue _____ Revisions: _____