State of California AIR RESOURCES BOARD

EXECUTIVE ORDER A-4-209

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 1998 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

Engine Family		Displacement (Cubic Inches)	Exhaust Emission Control Systems and Special Features
WNVXH0466CCD	7.6	(466)	Turbocharger Charge Air Cooler Engine Control Module Oxidation Catalytic Converter

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:

Total	Carbon	Nitrogen	<u>Particulates</u>
<u>Hydrocarbons</u>	<u>Monoxide</u>	<u>Oxides</u>	
1.3	15.5	4.0	0.10

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

Total	Carbon	Nitrogen	<u>Particulates</u>
<u>Hydrocarbons</u>	<u>Monoxide</u>	<u>Oxides</u>	
0.3	5.2	3.9	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.).

BE IT FURTHER RESOLVED: That the aforementioned engine family has been conditionally certified subject to the following conditions:

- 1. Any engine which employs a defeat device shall not be covered by this Executive Order.
- 2. Within 90 days following the issuance of this Executive Order, the manufacturer must show cause, to the satisfaction of the Executive Officer or his designee, that the strategy for fuel injection timing, including timing during the fuel economy mode, is not a defeat device.

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 10

day of December 1997.

R. B. Summerfield, Chief

Mobile Source Operations Division

LARGE ENGINE MÖDEL SUMMARY

Process Code: New Submission Manufacturer: Navistar A-4-209

EPA Engine Family: WNVXH0466CCD

3.BHP@RPM (SAE Gross)

4.Fuel Rate: mm/stroke @ peak HP (for diesel only)

Manufacturer Family Name: 5.Fuel Rate: (lbs/hr) @ peak HP (for diesels only)

DT-466E

7.Fuel Rate: mm/stroke@peak 6.Torque @ RPM (SEA Gross)

8.Fuel Rate:

1.Engine Code	2.Engine Model	SAE Gross)	(for diesel only)	(lbs/hr) @ peak HP (for diesels only)	6.Torque @ RPM (SEA Gross)	mm/stroke@peak	8.Fuel Rate: (lbs/hr)@peak torque	8.Fuel Rafe: 9.Emission Control (lbs/hr)@peak torque
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AZ3UC	A230C	230 @ 2300	118.5	92	660 @ 1450	129.5	60.5	DI FCM TC
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A250C	A250C	250 @ 2300	127.5	00	41100			•
	2000	200 @ 2000	0.121	000	opn @ 1450	129.5	60.5	DI FICM TO
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